GRADED REVIEW

QUESTIONS

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GRADED REVIEWS;

OR,

HELPS TO TEACHERS AND PUPILS IN ARITHMETIC,
GEOGRAPHY AND LANGUAGE,

CONSISTING OF CAREFULLY GRADED WORK IN THESE THREE.
STUDIES, EXTENDING OVER A PERIOD OF EIGHT YEARS.

AFTER THE NEW METHODS.

BY

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RESPECTFULLY DEDICATED

TO

WILLIAM N. BARRINGER,

SUPERINTENDENT OF SCHOOLS, NEWARK, N. J.

A GENTLEMAN CAPABLE, ENTHUSIASTIC, ENERGETIC, AND SUCCESS-
FUL IN HIS MISSION AS AN EDUCATOR.

PREFACE.

THIS book comprises a series of carefully graded and progressive questions upon the three fundamental branches of common education which are at present receiving special attention from the new school of educators. These questions are not in any sense "quizzisms," or what are generally denominated "test problems." They are plain and practical and calculated to meet the capacity of minds intelligently qualified for their respective grades. They were prepared for ordinary classes and pupils, not for the "*bright ones*" only, but for all, and any pupil who has studied the *subjects* upon which the questions are based, may review from the pages of this book with benefit.

The book affords daily work and opens up a field of suggestion and thought in the mind of a teacher, which is limited only by her originality and her aptness to *perceive* a suggestive thought. As to the practicality of these questions it is enough to say that the complete series has been the outgrowth of class work conducted within the personal experience of the authors.

The uses of the book are varied, thus: Does the teacher desire to be guided in a definite course of progressive study? She will find a valuable aid in Graded Reviews. Is there difficulty in organizing classes and allotting pupils to their proper place therein? A help may be found here at the teacher's hand. Does the teacher desire a reliable and positive guide to direct her in the course of each day's routine? or does she desire, after treating the subject in her own fashion, to examine and review her class? She will find here a comprehensive summary which will intelligently test the knowledge of her pupils upon the subjects taught.

Very often advanced pupils are confined to the work of their respective grades and fail to keep before them the successive steps of fundamental principles by which they progressed. By using the Graded Reviews as a text book, they may revert daily, if necessary, to simple problems and encourage at once a wider familiarity with the subject and a livelier comprehension of the whole range of the study.

With the earnest hope that teachers may be helped in their work so as to obtain better results with greater facility, the authors leave the book in their hands.

NEWARK, N. J., *December*, 188=.

ARITHMETIC.

FIRST YEAR IN SCHOOL.

FIRST TERM.

1. How many one-cent postage stamps can be bought with a two-cent piece ?

2. What one piece of money will pay for a two-cent stamp and a one-cent stamp?

3. Name some word that has three letters in it.

4. May is four years old and baby is one year; how much older is May than baby?

5. May is four years old and Jennie is half as old; how old is Jennie?

6. How many sticks of candy will a two-cent piece and a three-cent piece buy?

7. John has two tops and Willie has two times as many; how many has Willie?

8. How many oranges could you buy with a five-cent piece, if oranges cost two cents each?

9. 1 hat + 2 hats + 1 hat are how many hats?

10. How many two-cent tops can you buy for six cents?

11. What three pieces of money will equal five cents?

12. How many threes in six?

13. Four and one-half of four are how many?

14. Three is one-half of how many?

15. $4 + 2 =$ $5 - 3 =$ $\frac{1}{2}$ of $4 =$

    $2 + 3 =$ $6 - 4 =$ $\frac{1}{4}$ of $4 =$

    $3 + 1 + 2 =$ $5 - 2 =$ $\frac{1}{3}$ of $6 =$

16. $1 = \frac{1}{2}$ of ? $3 =$ of 6 $= \frac{1}{4}$ of 4

    $2 = \frac{1}{3}$ of ? $2 =$ of 4 $= \frac{1}{2}$ of 4

17. Willie has one-half of an apple and John has one apple; how many apples is that?

18. How much must we add to one-half of an apple to make two apples?

19. If an orange is worth six cents, how much is one-half of it worth?

20. How many two-cent postage stamps can be bought with six cents?

21. If I have a five-cent piece and buy three one-cent stamps, how much will I have left to buy postal cards?

22. What do we call one-half of a quart?

23. How many pints in a quart and a pint?

24. How must I divide an apple to give four boys each an equal piece?

25. How many halves in two and one-half?

26. How many are two 2's and two 1's?

27. How many are two 2's and one 1?

28. If I have one apple and give away three-quarters of it, how much of the apple will I have left?

29. What is one-half of four books? of four boys? of four caps? of four tops? of four quarters?

SECOND TERM.

30. How many days in a week? How many of them are week days?

31. What two pieces of money equal seven cents?

32. What two pieces of money will make eight cents?

33. If I hold up five fingers of one hand, how many fingers of the other hand must I hold up to make 8 fingers?

34. How many halves in four?

35. How many quarters in two?

36. Two apples and one-half of two apples are how many?

37. What is the difference between one-half of 8 and one half of 6?

38. Find the sum of one-half of 2, one-half of four, one-half of 6, one-half of 8.

39. How many more is 8 than 6?

40. How many more is 6 than two 2's?

41. How many more halves in 4 than in 3?

42. Willie is 8 years old; how much longer must he live before he is 10 years old?

43. What number between 8 and 10?

44. How many eggs can I buy for 9 cents if they are worth 1 cent apiece?

45. How many peaches at three cents apiece?

46. How many pine-apples at nine cents apiece?

47. How many more 3's in 9 than in 6?

48. What is $\frac{1}{3}$ of 9.

49. What will it cost to send 5 letters to Chicago?

50. 9 and 2 halves are how many?

51. What will be the cost of two bananas at two cents each, and two apples at one cent each, and one peach at three cents?

52. If I give a dime for this fruit what change should I receive?

53. Willie has two tops and John has 5 times as many; how many has John?

54. John has 10 tops, Max has $\frac{1}{2}$ as many; how many has Max?

55. How many heads have 4 children? How many eyes? ears? chins? hands? noses?

56. If I have 5 apples and cut each apple in half, how many pieces will I have?

57. If I eat 2 of the pieces, how many pieces will I then have left?

58. How many fingers have you?

59. If you were to lose one arm how many fingers would you lose?

60

$+ 4 = 9$	$\frac{1}{2}$ of $8 =$	$2 = \quad$ of 4
$3 + \quad = 7$	$\frac{1}{2}$ of $4 =$	$5 = \quad$ of 10
$8 - \quad = 3$	$\frac{1}{2}$ of $10 =$	$\quad = \frac{1}{4}$ of 8
$- 5 = 3$	$2 = \frac{1}{2}$ of ?	$\quad = \frac{1}{2}$ of 6
$+ \quad = 10$	$3 = \frac{1}{2}$ of ?	

61. How many more feet have 2 dogs than 2 boys? How many more heads?

62. If you cut a piece of paper into four equal parts what will one of the parts be called? What is each piece called?

63. Name some word that has more letters in it than cow?

64. How many more letters in the word "sweet" than "sour"?

65. 9 is 3 times what number?
66. 3 cents + 2 cents = 5 cents   2 times 2 cents =
     4 cents + 1 cent =   3 times 2 cents =
     6 cents + 3 cents =   4 times 2 cents =
     5 hats + 4 hats =   5 times 2 cents =
     9 men − 3 men =   4 cents and 2 cents =

THIRD TERM.

67. Give another name for 2 and 2 and 2.

68. How many sides has a square?

69. If $\frac{1}{2}$ of a melon is worth 5 cents what is the whole melon worth?

70. John is 9 years old, Willie is $\frac{1}{3}$ as old; how old is Willie?

71. John had 8 marbles and Max had $\frac{1}{4}$ of 8 marbles; how many marbles had both?

72. Three times what are equal to three ?

73. Three times what are equal to six?

74. How many thirds in one?

75. A boy ate an apple each day for a week; how many apples did he eat?

76. John lost one cent every day for a week, and then found two of them; how many of his cents were not found?

77. On how many days must he have lost two cents to have lost ten cents?

78. There are three feet in a yard; how many yards in six feet?

79. There are three feet in a yard; how many feet in one-third of a yard?

80. Four quarts make a gallon; what part of a gallon are two quarts?

81. Find the sum of two 2's + $\frac{1}{2}$ of 6 + $\frac{1}{2}$ of 8 + $\frac{1}{2}$ of 2.

82. How many halves in two and one-half?

83. Which is more, one 10 or ten 1's? two 3's or two 2's? two 4's or four 2's?

84. John has a five-cent piece, a two-cent piece, and a one-cent piece; Willie has three three-cent pieces; which has the most money?

85. Name five things you can buy for ten cents and tell what each costs.

86. 2 + 3 is ½ of what number?

87. Which is greater, five and three or seven and two?

88. Which is greater, 4 + 2 or 4 × 2?

89. Willie gets two cents for going an errand; how many errands must he run to get four oranges worth two cents each?

90. If I cut a foot off of a yard of ribbon how many feet will be left?

91. What is one-half of five apples?

92. One cat caught as many rats as she had feet, another cat as many as she had eyes, and another cat as many as she had heads; how many rats did they all catch?

93. How many are 10 cents less 2 cents + 1 cent + 3 cents?

94. Two, three, and four are how many?

95. If you eat two apples and a-half at one time and one apple and a-half at another time, how many apples will you have eaten?

96. John had four apples and his sister had twice as many; how many did she have?

SECOND YEAR IN SCHOOL.

FIRST TERM.

1. How many 5's in eleven? How many tens in eleven?

2. Name three numbers of which eleven is the sum.

3. What must be taken from eleven to leave a difference of twice three?

4. 6 + 4 + what equals eleven?

5. $\frac{1}{10}$ of 10 + what equals eleven?

6. Eleven is how much greater than ½ of 8 + ½ of 9?

7. How many should we add to eleven to make twelve?

8. What do we call twelve eggs? twelve inches? twelve months?

9. How many 4's in twelve?

10. Are there more 3's than 6's in 12? how many more?

11. How many halves in one? how many thirds? how many fourths? how many fifths? how many sixths?

12. What part of twelve is six? three? four? eight? nine? one?

13. One is what part of twelve? of six? of three? of four? of eight? of nine?

14. Four times ⅓ of 9 equals what?

15. What five pieces of money will make twelve cents?

16. One dozen and one are how many?

17. One foot and two inches are how many inches?

18. How many 7's are equal to 14?

19. ⅓ of 10 times ⅓ of 9 equals what?

20. Three, three, and a-third of three are how many?

21. Three times three and a third of three are how many?

22. Three less three and a third of three are how many?

23. Three, three, and less one-third of three are how many?

24. Two times five and five are how many?

25. How many nickles are equal to 15 cents?

26. How many half dimes are equal to 15 cents?

27. What is the answer to the following: ⅓ of 5 + ⅓ of 9 + ⅓ of 3 + ⅓ of 6 + 8 ÷ 4 + two 2's + 8 − 7 + 2 × 2?

28. ⅓ of 15 is how many more than ⅓ of 10?

29. Willie is 10 years old and John is seven times ⅓ of Willie's age; how old is John?

30. Mary is eight years old, and ⅓ of Mary's age is ⅓ of John's; how old is John?

31.
2 = ⅓ of?	4 = of 12
5 = ⅓ of?	5 = of 15
7 = ⅓ of?	3 = of 15
4 = ⅓ of?	7 = of 14
1 = 1/15 of?	6 = of 12

32.
+ = 15	Write with figures—
× = 15	I, V, IV, IX, X.
− = 10	
÷ = 10	

SECOND TERM.

33. ⅓ of 12 + 12 = ?

34. ⅓ of 10 + 12 = ?

35. ⅓ of 6 + 15 = ?

36. How many 6's in 18? how many 3's?

37. How many 9's?

38. Three 6's and 1 are how many? Two 9's and 2 are how many?

39. Which is the larger, ½ of 12 + ⅓ of 20, or ¼ of 12 + ⅓ of 9?

40. John has ⅒ of 20 cents, William has ⅒ of 10 cents, and Henry has ⅓ of 6 cents; which boy has the most money? How many cents have they all?

41. How many dimes are equal to 20 cents? how many nickels?

42. What is 20 sometimes called?

43. In what book do we read of three score and ten?

44. How many times is ½ of 20 contained in 20? ¼ of 20? ⅕ of 20?

45. ½ of 20 = ⅓ of what?

46. ⅓ of 9 is what part of 12?

47. ⅓ of 18 is three times what number?

48. How many school days in four weeks?

49. A man had three quarts of cider. He put it up in bottles, each bottle holding two pints; how many bottles did he fill?

50. If 5 lemons cost 20 cents, how much would 4 lemons cost at the same rate?

51. 8 is ⅓ of the number of cents John has; how many cents has he?

52. 9 and 9 and ⅓ of 9 are how many?

53. How many pints in one quart and one pint?

54. How many must we add to three 6's to make 19?

55. 12 — ⅓ of 12 are how many?

56. Two 6's from three 6's leave how many?

57. If six apples are worth 6 cents, what is ⅓ of six apples worth?

58. How many 3's in two 6's?

59. How many 6's in two 9's?

60. How many 5's in two 10's?

61. How many 10's in one 20?

62. ½ of 20 + ¼ of 20 + ⅕ of 20 = ?

63. Two 5's + five 2's are how many?

64. Two 4's + four 2's are how many less than 20?

65.

+	= 19	3 ×	= 18
—	= 7	14 ÷	= 2
×	= 20	× 4	= 20
÷	= 8	20 —	= 18

66.

5 = ⅓ of?	3 = of 12
4 = ⅓ of?	4 = of 20
2 = ¼ of?	2 = of 14
1 = ⅓ of?	7 = of 14

THIRD TERM.

67. John had four three-cent pieces. He bought a pencil for three cents, a top for four cents, and an orange for four cents; how many cents had he left?

68. If oranges are worth two cents, how many can I buy for eleven cents and how many cents will I have left?

69. John gave me five cents which I added to seven cents I already had. I then spent four cents; how many cents had I left?

70. If you had an apple and gave away ⅕ of it, what part would you have left?

71. If you can buy six oranges for 18 cents, how much will five oranges cost?

72. If seven apples can be bought for 14 cents, how many can be bought for 12 cents?

73. A man had 20 dollars. He gave away on Monday ½ of it, on Tuesday ¼ of it, on Wednesday ⅛ of it; how many dollars did he have left?

74. If vinegar is worth three cents a quart how much must I pay for one gallon and a half?

75. John had three apples, which was ⅓ of the number his brother had; how many had his brother?

76. John had 4½ apples; how many thirds had he?

77. Mary bought an orange for 3 cents, three pencils worth two cents each, and gave the storekeeper a ten-cent piece; how much change should she receive?

78. How many pints of peanuts can you buy for ten cents, when one pint costs five cents?

79. May found three pins, John found nine pins, and William found seven pins; how many pins did they all find?

80. How many more pins did May and William together find than John?

81. What will a pint of milk cost at two cents a gill?

82. If two quarts of vinegar cost sixteen cents how much will one pint cost?

83. If two quarts of milk cost twelve cents, how much will one quart and one pint cost?

84. John threw a ball seven feet; how many feet must he walk to go to the ball and return to the place from whence he threw it?

85. Willie threw an apple five feet toward the right, and another six feet toward the left; how many feet apart were they?

86. A hall is three feet wide and five feet long; how many feet must May travel to walk around the hall?

87. The end of a schoolroom is twenty feet long. There are two windows in the end, each three feet wide, the rest of the distance is fitted with blackboards; how many feet long are the blackboards?

88. A hall is eighteen feet long. Lily is in one end and Jane is in the other end of the hall; Jane walks four feet toward Lily and Lily walks six feet toward Jane; how many feet are they apart?

89. Thomas has four playmates; if they each give him five apples how many apples will he have?

90. How many working days are there in two weeks?

91. If two men can do a piece of work in four days, how long will it take one man to do it?

92. If it takes one man fifteen days to do a piece of work, how long will it take three men to do the same piece of work?

93. If a man receives two dollars a day, how much should he receive in a day and a-half?

94. How many inches in one foot and three inches?

95. If a man receives five dollars for two days' work, how much should he receive for one day? How much for four days?

96. How many inches in a quarter of a foot?

97. Mary had three apples, John had three times as many; how many had both?

98. ⅓ of 9 is what part of 6? ⅕ of 10 is what part of 6?

THIRD YEAR IN SCHOOL.

FIRST TERM.

1. If a class has fifty-six good slates and eight cracked ones, how many slates have they in all? How many more perfect than cracked ones?

2. John walks five miles and rides seven miles; how many miles does he travel?

3. A boy had twenty-four marbles; he lost ⅓ of them; how many had he left?

4. If a father gives his son two cents a day, how much will he have in one week and a half?

5. Four boys have twenty-four tops; if they divide them equally, how many will each have?

6. Which is greater and how much, ⅕ of 40 or 7? 𝟏/𝟏𝟐 of 36 or 20? ⅔ of 36 or 24? ⅐ of 49 or 10?

7. How many 10's in 3 + 4 + 8 + 5 + 5 − 3 + 8?

8. How many 8's in 8 × 2 + (9 + 5 + 2)?

9. John had thirty-seven cents; he spent four cents for a slate, five cents for a book, eleven cents for a box, lost seven cents and gave ⅓ of nine cents to Willie; how much had he left?

10. John is ten years old, Max is two years older, and their father is twice as old as the sum of their ages; how old is he?

11. Henry bought two hats at two dollars each, five books at one dollar each, and a cane for three dollars; he gave a twenty-dollar bill; how much change ought he to receive?

12. 5 times ⅓ of 8 + 3 times ⅓ of 18 are how many?

13. ⅓ of 24 is what part of 9?

14. ⅙ of 24 is how many times 4?

15. What nine pieces of money will equal one quarter of a dollar?

16. What does three times four mean? (Four taken three times.)

17. What does four times three mean?

18. How many fifths in one and one-fifth?

19. How many inches in one foot and a-half?

20. How many inches in a quarter of a yard?

21. If an apple and a-half cost a cent and a-half, what will three apples cost?

22. 11 + 13 is how many times 4? 10 + 8 is how many times 6?

23. A shoemaker made twenty-eight boots; what were they worth at three dollars a pair?

24. A man had two dozen eggs; how many 6's was that?

25. Name three numbers that can be divided by nine without a remainder?

26. John read a quarter of an hour one day, and half an hour another day; how many minutes did he read?

27. Write the odd numbers between one and thirty and find their sum.

28. Write the odd numbers between thirty and fifty and find their sum.

29. George bought a quire of paper of one man, and fifteen sheets of another; how many sheets did he buy?

30. John read one hour a day in February, and one hour a day during one half of April; how many hours did he read?

31. From the number of days in a year subtract the sum of the days in April, June, September, and November.

32. 35 — (2 + 3) and how many 10's are left?

33. How many inches in one yard, one foot and eight inches?

34. If I have seven five-cent pieces, how many two-cent pieces must I get to have thirty-nine cents.

35. What will twenty two-cent stamps, and one one-cent stamp cost me?

36. How many months, weeks, and days in forty-six days?

37. I have six bottles of vinegar, each bottle holds one pint. How much is my vinegar worth at forty-eight cents per gallon?

38. How much will two quarts of milk cost at two cents a gill?

39. How many more 2's than 3's in 24?

40. Three boys picked cherries; John picked eight quarts, Eddie seven quarts, and Henry nine quarts; they divided them equally; how many quarts did each boy have?

41. Three boys played marbles; John won twenty-one marbles, Charles won one-seventh as many, George three-sevenths as many; how many marbles did Charles and George win together?

42. If a man manufactures three chairs a day, how many will he manufacture in a week?

43. Milton threw a stone nine feet up the road and another twelve feet down the road; how far are the stones apart?

44. Anna bought twenty-five pounds of sugar, and on her way home she lost two-fifths of it; how many pounds of sugar did she bring home?

45. If three men can build a wall in nine days, how long will it take one man to build the same wall?

46.

$\frac{1}{2}$ of 10 =	14 + 5 =
$\frac{1}{3}$ of 12 =	9 + 7 =
$\frac{1}{4}$ of 20 =	14 − 3 =
$\frac{3}{5}$ of 15 =	6 × 3 =
$\frac{3}{4}$ of 16 =	16 ÷ 4 =
$\frac{2}{3}$ of 15 =	14 + = 21
$\frac{1}{10}$ of 20 =	17 − = 4
$\frac{2}{3}$ of 18 =	3 × = 21

SECOND TERM.

47. Find the sum of $\frac{1}{2}$ of 6 + $\frac{1}{4}$ of 4 + $\frac{1}{2}$ of 8 + $\frac{1}{5}$ of 10 + $\frac{1}{4}$ of 12 + $\frac{1}{7}$ of 21 + $\frac{1}{3}$ of 24 + $\frac{1}{3}$ of 27 + $\frac{1}{10}$ of 30. (These answers to be put in column and added.)

48. Enough tea was taken to a picnic to give sixteen people each a gill cupful; how many quarts were taken?

49. At a party there were two gallons of lemonade drunk. Each person drank one gill; how many persons were at the party?

50. From the sum of $\frac{1}{4}$ of 18 + $\frac{1}{2}$ of 12 + $\frac{1}{4}$ of 16 + $\frac{1}{7}$ of 49 + $\frac{1}{10}$ of 50 take the sum of $\frac{1}{4}$ of 15 + $\frac{1}{2}$ of 6 + $\frac{1}{4}$ of 12.

51. $\frac{1}{2}$ of 24 + $\frac{1}{4}$ of 24 + $\frac{1}{4}$ of 24 is what part of 26?

52. Eight men went into a lumber camp for one month. It was thought each man would eat three pecks of potatoes; how many bushels were sent?

53. From the number of weeks in a year take the number of weeks in one and one-half months.

54. What would two bushels of apples cost at twenty cents a peck?

55. What will a peck of potatoes cost at one dollar a bushel?

56. Add $\frac{1}{4}$ of 48 + $\frac{1}{5}$ of 25 + $\frac{1}{10}$ of 80 + $\frac{1}{2}$ of 50.

57. If eggs are worth 3 cents a-piece what will be the cost of 3 dozen?

58. Find the sum of $\frac{1}{10}$ of 10 + $\frac{1}{10}$ of 20 + $\frac{1}{10}$ of 30 + $\frac{1}{10}$ of 40 + $\frac{1}{10}$ of 50 + $\frac{1}{10}$ of 60 + $\frac{1}{10}$ of 70 + $\frac{1}{10}$ of 80 + $\frac{1}{10}$ of 90 + $\frac{1}{10}$ of 100.

59. From the sum of $\frac{1}{2}$ of 18 + $\frac{1}{4}$ of 80 take the sum of $\frac{1}{2}$ of 12 times $\frac{1}{2}$ of 10.

60. Add the number of inches in $\frac{1}{2}$ of a foot + $\frac{1}{2}$ of a yard + $\frac{1}{4}$ of a foot + $\frac{1}{4}$ of a yard + $\frac{1}{4}$ of a foot + $\frac{1}{4}$ of a yard.

61. Add $\frac{1}{2}$ of 60 + $\frac{1}{2}$ of 60 + $\frac{1}{4}$ of 60 + $\frac{1}{5}$ of 60 + $\frac{1}{6}$ of 60.

62. What will one and one-half dozen eggs cost at 18 cents a dozen?

63. What will a boy earn in a year if he receives 2 dollars a week?

64. Add the number of weeks in one year + 1 month + $\frac{1}{2}$ month + $\frac{1}{4}$ of a year.

65. Add the number of pints in 1 quart + $\frac{1}{2}$ gallon + 1 gallon + 8 pints + 16 gills.

66. How much greater is $\frac{1}{2}$ of 12 than $\frac{1}{4}$ of 16?

67. If 1 dozen melons were required to supply each person at a picnic with $\frac{1}{2}$ of a melon, how many persons were there?

68. How many dozen melons will be required to furnish 36 persons with $\frac{1}{2}$ of a melon each?

69. ¼ of 48 is what part of 24?

70. George had 3 apples, William had 5 apples, and John had 8 times as many as the other two together; how many had John?

71. William had a stick 5 feet 6 inches long. Henry had one 4 feet 4 inches long, and John had one 2 feet 2 inches long. How many feet did all of the sticks measure?

72. What would be the cost of 5 yards of stovepipe wire at 1 cent a foot?

73. A boy had 4 and ½ apples in one dish, and 4 and ½ apples in another dish; what part of 18 apples did he have?

74. How many fourths in 4 and ½?

75. At 40 cents a gallon what will 1 pint of milk cost? 3 pints?

76. At 40 cents a gallon what will 1 quart and a pint of vinegar cost?

77. Find ½ of 510 and from it take ½ of 279.

78. William had 162 cents, John had four times as many; how many had John?

79. If 5 apples cost 15 cents what will 3 apples cost?

80. If a snail crawls 1 yard in 2 minutes, how long will it take to travel 1 rod?

81. How many feet in 1 and ½ yards? 2 yards and 6 inches?

82. A boy saves 9 cents a week for 1 year; how many oranges could he buy with his year's savings at 3 cents each?

83. If 1 dozen bananas are worth 60 cents, how much are 7 bananas worth?

84. Divide 630 by 5, 240 by 8, 279 by 9, and add the three answers.

85. How many yards in 72 inches?

86. A man threw a stone 1 rod down the road and another 5½ rods up the road ; how many rods apart were the stones?

87. How many 3's in the sum of 6, 9 and 18?

88. George is 16 years old, and ½ of George's age is ½ of Willie's age; how old is Willie?

89. A doctor left his office and rode 5 miles to see a sick

man; he returned to his office and then rode 7 miles to see a sick boy; when he returned, how many miles had he ridden?

90. 1 is what part of 10?

91. 6 is what part of 24? of 30? of 36? of 48?

92. If I start for Philadelphia at 11 o'clock in the morning and am 4 hours in getting there, what time will it be when I arrive there?

93. A pond is 3 feet deep. I wish to drive a stake 2 feet in the mud and have 3 feet out of the water; how long should the stake be?

94. A post is 10 feet long; ¼ of it is in the ground; how many feet of the post is above ground?

95. How many dollars must I have to give 20 boys ¼ of a dollar each?

96. 6 gallons and 24 quarts are how many gallons?

97. I bought 3 watches at 18 dollars each, and gave the man six ten-dollar bills; how much change should I receive?

98. I draw a square with each of its sides 1 foot long, and divide each side into 12 equal parts, and connect these points by 12 vertical and 12 horizontal lines; how many squares will I make, having each side 1 inch long? How many square inches in one square foot?

99. A man who has 6 little pigs sells 2 of them at 3 dollars each, and the others at 4 dollars each; how much does he get for the pigs?

100. Sold a harness for $56, and by so doing gained $8; what should I have received for it so as to lose $8?

101. What is the cost of 17 three-cent stamps, 10 two-cent stamps, and 9 postal cards?

102. What 8 pieces of money will make a dollar?

103. What 12 pieces of money will make 25 cents?

104. What is the sum of three 10-cent pieces + ten 3-cent pieces?

105. If 15 chairs cost $90, what must I pay for 13 chairs?

106. It takes 6 feet of picture wire to hang one picture; how many yards must I get to hang 6 pictures?

(FOR OTHER TESTS SEE LAST TERM OF SECOND YEAR.)

FOURTH YEAR.

1. At 48 cents a gallon what will 3 quarts of vinegar cost?

2. If a pie be divided into eighths (represent this on black-board) how many pieces will two boys have if each receives ¼ of the pie?

3. A boy threw a stone 2 rods up the road; his brother got it for him; how many steps did he take altogether, if each rod required 12 steps?   *Ans.* 48.

4. What will 4 dozen eggs cost at 2 cents apiece?

5. John had 6 apples + 4 apples + ½ apple + ¼ apples + ⅜ apples + ⅜ apples; how many did he have?

6. If John travels 9 miles from B. toward the north, and Charles 7 miles from B. toward the south, how far apart will they be?

7. A lady bought a book for eight dollars and a-half, a carpet for fifty-six dollars, a stove for twenty-four dollars and a quarter, and a picture for sixteen dollars and three-quarters; how much money did she spend?

8. Mr. Brown paid $7,640 on his house, and it is worth 9,235; how much does he still owe?

9. If a man earns $18 one week and $17 the next week, how much will he have left after spending $10?

10. If one yard of silk cost $2.40 how much would 8 yards cost?

11. If one pound of coffee costs 40 cents how much would 2¼ pounds cost?

12. If butter is worth 48 cents a pound, how much would ½ of a pound cost?

13. If twelve baskets of peaches cost 24 dollars, how much would one basket cost?

14. If one quart of nuts cost 12 cents, how much would a peck cost?

15. If one bushel of corn cost 80 cents, how much would a peck cost?

16. How many halves in ⅜?

17. What will 3 bushels of potatoes cost at 9 cents a quart?

18. How many cents in $7 + ½ dollars + ¾ dollars?

19. What is the difference in cost of 20 lemons at 3 cents each and 25 pears at 5 cents each?

20. What will 4 quarts of peanuts cost at 6 cents a pint?

21. Divide 17,275 by 5, and multiply that answer by 8.

22. Multiply 36,528 by 3 times 4.

23. Add the answers of the following: ½ of 12 + 56 + ½ of 8 + ¼ of 8 + 144.

24. Bought one book for 25 cents, another book for 18 cents, and paid for them 8 pints of chestnuts at 5 cents a pint; how much do I still owe?

25. Paid 70 cents for a book and 15 cents for a bag. Gave storekeeper $1; how much change should I get?

26. In how many days can I earn $50 at $2.50 per day?

27. Find the sum of the twelves in 144 + the eights in 96 + the fives in 40 + the elevens in 99 + the sixes in 72 + the threes in 18 + the fours in 48 + the twos in 20 + the sevens in 49 + the nines in 81 + the tens in 50.

28. 3)2,796(+   4)1,664(

29. From the sum of 248 + 156 take their difference.

30. From 5)2,440(take   6)1,254(

31. John had 245 cents, William had 13 times as many: how many had William?

32. What will be the cost of 4 apples if 6 apples cost 24 cents?

33. If 5 gallons of oil cost $23.40, what will one gallon cost?

34. Add ⅔ of 12 + ¼ of 24 + ⅗ of 15 + ¼ of 20 + ½ of 8 + ⅚ of 24 + ⅕ of 30.

35. Which is the greater, ¼ of 48 or ⅔ of 54? How much greater?

36. How many apples worth 5 cents each can you buy for ¾ of 40 cents?

2

37. It took one dozen melons to supply each person at a picnic with ⅛ of a melon; how many persons at the picnic?
Ans. 96.

38. Enough tea was taken to a picnic to give 80 persons a gill cupful: how many gallons were taken?

39. Twenty men went into a lumber camp for one month; each man was to be allowed 3 pecks of potatoes: what would they all cost at 50 cents a bushel?   *Ans.* $7.50.

40. A house has 4 sides, each side has 5 windows, each window has 6 panes; what will be the cost of the glass at 20 cents a pane?

41. If 2 quarts of peanuts cost 20 c., what will 1 pint cost?

42. Add ½ of 8 apples + ⅓ of 12 apples + ¼ of 16 apples.

43. Add ½ of $\frac{4}{5}$ + ⅓ of $\frac{9}{7}$ + ½ of $\frac{7}{4}$.

44. Add ½ of 20 sheep + ⅓ of 18 sheep + ½ of 6 sheep.

45. Add ½ of $\frac{8}{10}$ + ½ of $\frac{4}{10}$ + ½ of $\frac{6}{10}$.

46. How much longer is 1 foot than ⅓ of a yard?

47. Divide ⅔ of 560 by 6.

48. How many whole ones in $\frac{5}{2}$ + $\frac{8}{3}$ + $\frac{7}{2}$?

49. How many quarts and pints in 17 pints?

50. If I buy a cow for $50 and sell her so as to gain $\frac{1}{10}$ of what she cost, what do I get for her?

51. How many times 8 is 24 times 12?

52. What will 18 chairs cost at $18 a dozen?

53. During leap year George read 5 verses a day in the Bible; how many verses did he read during that year?

54. 7 times 9 are how many times 21?

55. Multiply 654 by 7 and again by 8 and add the products.

56. How many fifths in ½ of 5?

57. How much more is 480 multiplied by 9 than 480 multiplied by 6?

58. A tailor makes 432 coats in a year and puts 15 buttons on each coat; how many dozen buttons does he use?

59. A man paid $18 a bbl. for 2 bbls. of sugar, and 75 c. for freight upon them; how much did the sugar cost him?

60. William lives 140 yards north of the schoolhouse.

One morning he went for John, who lives 63 yards south of the schoolhouse, and then went to school; how many yards did he walk? *Ans.* 266.

61. A building is 24 feet wide and 54 feet long; how many yards does the building measure around its sides?

62. If a boy takes 2 feet to a step how many steps will he take in walking around the wall of the building?

63. Add 7 times $\frac{1}{10}$ of 80 to 10 times $\frac{1}{3}$ of 63 and from this subtract 6 times $\frac{1}{11}$ of 99.

64. How many fourths in $5\frac{1}{2}$?

65. How many ones in 5 times 3 divided by 5?

66. If 8 baskets of peaches cost $10.40, what is the cost of 5 baskets?

67. How many cents in $\frac{1}{4}$ dollar, $\frac{1}{4}$ dollar, a dime, and a half dime?

68. If you have 30 c. what part of it must you pay for a 5-cent stamp?

69. If $\frac{1}{3}$ of a piece of cloth contains 4 yards, how many yards are in the whole piece?

70. If 2 c. pays for $\frac{1}{5}$ of a pie, how many cents will buy 2 pies?

71. William worked 6 days at 10 c. a day and took his pay in oranges worth 5 c. apiece; how many oranges did he receive?

72. William engages to run errands. He is to receive 5 c. for every 2 errands. When he has run 10 errands, how much has he earned?

73. How many fifths in the sum of $\frac{2}{5}$, $\frac{1}{2}$ and $\frac{4}{5}$?

THIRD TERM.

74. What 18 pieces of money make a dollar?

75. 3 times 12 is 4 times what number?

76. Addition is finding the sum of two or more numbers. Write the number of letters in each word of this statement in a column, and find the sum.

77. $\frac{2}{3}$, $\frac{1}{4}$, $\frac{2}{5}$, $\frac{3}{4}$ are how many ones?

78. Seven and six, or six and seven, give a three in units place. How many are $6 + 7$? $7 + 6$?

79. Add the following columns:

6	7	6	0
1	2	4	2
3	1	6	7
6	7	2	3
2	1	2	0
2	2	6	0
6	7	2	6
4	1	5	4
6	2	0	7
3	7	0	6
4	3	—	—
—	3		
	—		

(In like manner arrange other combinations.)

80. If 9 cents will buy 3 oranges, how many oranges will 15 c. buy?

81. If I had $40 and gave away ½ of it, spent ¼ of it, and lost ⅛ of it, how much money would I have left?

82. If there are 9 square feet in 1 square yard, how many square feet in 40 square yards?

83. If 9 square feet make 1 square yard, how many square yards in 459 square feet?

84. If there are 144 square inches in 1 square foot, how many square inches in 16 square feet?

85. If there are 144 square inches in 1 square foot, how many square feet are there in 1,584 square inches?

86. One man had 1 horse, 1 cow and 2 sheep, another man had 2 sheep, 1 cow and 2 horses; how many horses, sheep and cows did both have?

87. One boy picked 2 gills, 1 pint and 1 quart of chestnuts; another boy picked 1 quart, 1 pint and 2 gills; how many quarts, pints and gills did both pick?

88. How many more legs have 18 dogs than 18 boys?

89. Add the number of bones in the two hands, 2 ears, 2 arms, 2 legs and 2 feet.

90. Count the panes of glass in the windows of your schoolroom and find what they would cost at 10 cents apiece?

91. If every pupil in your class had 8 c. how many cents would that be?

92. How many thirds in 3 and ⅓?

93. How many whole ones in ⅙?

94. ¼ of 8 is what part of 12?

95. ⅓ of 9 is what part of 18?

96. ¼ of 12 is what part of 6?

97. 2 + 2 + ¼ + ⅓ is what part of 24?

98. 3 + 7 — 5 is what part of 10?

99. 8 + 8 and how many make 31?

100. What part of 32 is 8 + 8?

FIFTH YEAR.

FIRST TERM.

1. From six thousand and six thousandths take two thousand and two thousandths.

2. What is ⅓ of 913,038?

3. Two thousand thirty-six and thirty-seven thousandths is one-sixth of what number?

4. A man bought a house for $2,172. He paid $115.75 for painting it and then sold it so as to gain $175.25. For what did he sell it?

5. By selling land for $4,075.75 I gained $104; what did it cost me?

6. What was the cost of 127.5 acres of land at $42 per acre?

7. What is $\frac{2}{11}$ of 23,851?

8. I bought a horse for $237 and sold it at a loss of $56.50; what did I sell it for?

9. I sold a carriage for $113.25, and by so doing lost $11.50; what did it cost me?

10. What is the cost of 10 bags of coffee, each containing 76.5 pounds, at 12¼ c. per lb.?

11. For what must I sell a colt that cost me $27, in order to gain $5.25?

12. From ⅚ of 861 take ⅓ of 945.

13. Multiply the sum of 9.04 and 2.2 by their difference.

14. If 7 men can do a piece of work in 15 days how long will it take 5 men to do it?

15. If $42,881.52 be divided among 407 men, how much will each receive?

16. $(500 + .03 - .002) \times 5 = ?$

17. From ⅘ of 549 take ⅝ of 248.

18. From $4.5 + 94.005$ take $8.8 \div 6.3$.

19. B. has $832, A. has 1 dollar, 4 dimes and 4 cents; how much more has B. than A.?

20. Eight times 16 + ¼ of 16 plus three times 16 plus ½ of 16 are how many times 16?

21. Among how many boys must $12 be divided that each boy may receive 75 cents?

22. ⅘ + ⅓ + ¾ + ⅔ + ¼ = ?

23. How many eggs must I give to pay a debt of $244.25 if eggs are worth 60 cents a dozen?

24. From 505 take 505 thousandths.

25. A man received 5,888 lbs. of sugar in exchange for 1,840 lbs. of butter at 32 cents per lb.; what was the sugar worth a pound?

26. $8 \div .8 = ?$ $+ .8 \div 8 = ?$ $+ .8 \div .8 = ?$

27. How much money is one 20-dollar bill, five 5-dollar bills, two 1-dollar bills, two half-dollars, five quarters, ⅘ of a dollar, 4 times $\frac{7}{10}$ of an eagle and six 5-cent pieces?

28. Find the sum of $\frac{4}{11}$ of 55 + $\frac{9}{10}$ of 40 + $\frac{8}{12}$ of 24 + ⅞ of 56 + ⅗ of 49 + ⅚ of 60, and from it subtract ⅝ of 72.

29. How much greater is the product of ¼ of 16 multiplied by ⅘ of 9 than the sum of ½ of 8 + ⅔ of 9?

30. If it takes 8 men 20 hours to do a piece of work, how long will it take 6 men to do the same work?

31. Add 48,000.048, 27 hundred and 27 hundredths, and from their sum subtract the number of days in a year.

32. 250 acres of land cost me $41,250. I sold it at $250 per acre; did I gain or lose, and how much?

33. I sent a message of 44 words by telegraph. I paid 40 c. for the first 10 words and 2 c. each for every additional word. Find cost of the message.

34. A man began business with $36,000. At the end of 9

years he was worth $61,875; what was the average of his gain per year?

35. What is the value of 32 bales of cotton, containing 325.5 lbs. each, at $.46 per lb.?

36. A man bought 7 chairs at $3.75 each. He sells them at a profit of fifty cents each; what does he get for the seven chairs?

37. A man bought 68 bbls. of flour at $8.75 per bbl. and paid $176; what remained due?

38. A man bought 36 yards of carpet at 75 c. per yard and paid for it $11 cash and the remainder in potatoes at 80 c. per bushel; how many bushels of potatoes did he give?

39. James has 8 c., William has 10 times as much, and John has $4. How much more has John than James and William together?

40. A man bought 320 acres of land at $80 per acre. He sold 180 acres at $70 per acre, and the rest at $110 per acre; how much did he gain?

41. A man having $4,440, gave each of his three sons $500, and each of his four daughters $475.375, how much had he left?

42. What is the product of 908,060 times three thousand four hundred?

43. What do I save a year, my income being $1,600 a year and my expenses $15 a week?

44. $43\frac{4}{10} \times .25 \times 14 - (\frac{2}{10} + 2)$?

45. Two men start from the same point and travel in opposite directions. One travels 5 hours and goes 6 miles an hour, the other travels 6 hours and goes 8 miles an hour; how far apart will they be at the end of their journeys?

46. $\frac{1}{2}$ of $1 + $\frac{3}{10}$ of $1 + $\frac{3}{4}$ of $1 + $\frac{1}{4}$ of $1 + $\frac{2}{3}$ of $1, is how much more than 12 three-cent pieces?

47. At $8\frac{1}{4}$ per ton, how much coal can you buy for $82.50?

48. If 25 oranges cost $62\frac{1}{4}$ cents, and 72 apples cost $1.08, how much more will one orange cost than one apple?

49. If you sell 802 hats which cost you $7 each at $5 each, how much will you lose?

50. Write as decimal fractions and find the sum of the following: $\frac{88}{100} + \frac{827}{1000} + \frac{16}{100} + \frac{5}{10} + \frac{7}{1000}$.

51. If a pint of berries cost 6 c. what will 3 pks. cost?

52. What will be the cost of 12.66 bu. of wheat at $1.25 per bu. ?

53. If 6 gals. of wine cost $24, what will 1 pint cost?

54. How much will 56 gals. of vinegar cost at 10½ c. a quart?

55. By selling peanuts at 8 c. a pint, I double my money. What do they cost me per bu.?

56. If 5 yards of ribbon cost 60 c. how much do I gain if I make 18 badges and sell them at 5 c. each, each badge requiring 10 inches of ribbon?

57. I sold apples for $5.12 a bushel, and doubled my money; what did they cost me a peck?

58. What will 2 tons 3 hundred weight of coal cost at $7 per ton?

59. From 505 thousand take 505 thousandths.

60. If 16.2 bus. corn cost $32.40 what will 5.5 bus. cost?

61. What will 4.2 gals. of wine cost at 8½ c. per gill?

62. How many tons of hay worth 80 c. a cwt. will pay for 24 cows worth $32 each?

63. A man began walking at 8.52 A.M. and walked till 3.07 P.M.; how many hours did he walk?

64. A. B. C. and Co., whose store is in Boston, sold, October 17, 1884, John White 62 yards flannel at 49 c., 38 yds. ticking at 29 c., 86 yds. sheeting at 29 c., 42 yds. carpet at $3.65. Make out a receipted bill.

65. If a railroad train runs 30 miles an hour how long will it take to run from New York to Philadelphia, a distance of 93 miles?

66. A man sets out to travel 275 miles. He walks 35 miles a day for 7 days; in how many hours will he finish his journey if he travels a mile in 15 minutes?

67. Multiply $16.25 by .08.

68. A man had $75.50 and lost ⅗ of it; how much had he left?

69. $34 + (315 + 7) \times 2 = ?$

70. ⅓ of 880 times ⅔ of 600 = ?

71. 87.69 times 87.9 = ?

72. (₈⁄₁₀ + ₈⁄₁₀ + ₄⁄₁₀) − ₉⁄₁₀ = ?

73. If 8 bus. of wheat make 2 bbls. of flour, how many bushels will make 8 bbls.?

74. 8 and 8 tenths is how much less than 8 tens and 8 tenths?

75. Express the following numbers in words: .023; 1000.12; 25.001.

76. If $728.36 is ⅓ of my money, how much money have I?

77. How many 5ths in ⅓ of 12?

78. The product of two numbers is 984, the multiplicand is 82; what is the multiplier?

79. The quotient of two numbers is 96, the divisor is 5; what is the dividend?

80. The difference of two numbers is 802, the minuend is 821; what is the subtrahend?

THIRD TERM.

81. To the L.C.M. of 2, 4, 8, 12, add the L.C.M. of 12, 3, 8, 6.

82. ¼ × ⅓ × ⅔ × ⅘ lacks how many of 1 whole one?

83. ⅝ is how much less than ½?

84. ¼ of ⅔ of ⅜ of ⅞ of 18 is what part of 30?

85. ⅓ of 60 + 7 is how many times ⅓ of 27?

86. 24 is the divisor, 96 is the dividend and 4 is the quotient; if I multiply the divisor and the dividend by 2 what will be the quotient? If I divide the divisor and the dividend by 2 what will be the quotient? Why?

87. ⅓ c. + ¼ c. + ⅝ c. + ₁⁄₁₂ c. is what part of 9 c.?

88. James had ⅞ of an apple and gave away ¼ of it; how much had he left?

89. The subtrahend is ⅘, the difference is ⅓; what is the minuend?

90. How much less is the least common multiple of 4, 8, 16 than the L.C.M. of 3, 6, 9?

91. If $20 is ⅓ of a man's weekly wage, how much does he earn in a week?

92. From 8,454 subtract a number ¼ as large.

93. William had $214, John had 5 times as many dollars, and the difference between William's and John's money was what James had; how much had James?

94. A watch cost $24 and a chain ¼ as much; what did both together cost?

95. What will 1 dozen dozen eggs cost at 2 c. each?

96. A table is 3 feet wide and 12 feet long; how many square yards does its surface contain?

97. How many sq. inches in 13 sq. ft. ?

98. In 720 sq. inches how many square feet?

99. If I dig a hole 3 feet wide, 3 feet deep and 3 feet long, how many cubic feet of earth do I take out?

100. Subtract the number of cubic feet in ¼ of a cubic yard from the number of cubic feet in 2 cubic yards.

SIXTH YEAR.

FIRST TERM.

1. Add 1 million and 1 millionth; 2 thousand and 2 thousandths; 3 hundred and 3 hundredths; 1 ten and 1 tenth.

2. What will 82 tons of coal cost at $5.75 per ton?

3. What will 18 cigars cost at $3 per hundred? (N.B. One costs as many cents as they are dollars a hundred.)

4. What will 24 hats cost at $90 per hundred?

5. From 116 yards of calico 15¾ yards were sold; how much remained?

6. From the sum of ¾ + ¼ + ⅝ take the sum of ⅝ + $\frac{7}{10}$. (Answer in lowest terms.)

7. From 10 and 12 tenths take 3 and 2 hundredths.

8. A man bought 2 tubs of butter; the first weighed 40¾ lbs., the second, 30¾ lbs.; the tubs weighed 6¼ and 7$\frac{1}{16}$ lbs. How many lbs. of butter did he buy?

9. Write the following as decimals and find the sum :

$\frac{8}{10}$, $\frac{7}{100}$, $\frac{6}{1000}$, $\frac{8}{100}$. $\frac{4}{100}$, $\frac{14}{18}$

10. Write the following as common fractions and reduce to lowest terms: .8   .25   .120   .18   .6.

11. The minuend is $\frac{5}{8}$ and the difference $\frac{3}{12}$; what is the subtrahend?

12. The subtrahend is $\frac{7}{13}$, the difference is $\frac{7}{14}$; what is the minuend?

13. From 19 take $9\frac{5}{6}$.

14. The sum of two numbers is $1\frac{13}{15}$, one of the numbers is $\frac{14}{15}$; what is the other?

15. From 1 ten take 1 tenth, and take the difference from 1 hundred and 1 hundredth.

16. Find the sum of the answers to the following: 18 + 1.8; 18 + .18; 1.8 + 18; .18 + 18; .18 + 1.8; 1.8 + 1.8; 18 + 18.

17. A man had $\frac{1}{4}$ of his money in one box, $\frac{1}{3}$ in another and $\frac{1}{6}$ in another; what part of his money was in a fourth box?

18. If the whole of his money was $600, how much was in each box?

19. A man had $\frac{1}{4}$ of his money in one pocket, $\frac{1}{3}$ of his money in another pocket and $25 in another; how much money had he?

20. A man has 5781.30 lbs of tea; he desires to put it in chests containing 165.18 lbs.; how many chests must he order?

21. How much more is 19.9 than $18\frac{8}{10}$?

22. The product is 1.665, the multiplicand is 3.33; what is the multiplier?

23. If I give $8.10 for 18 yards of gilt moulding, how much is that a foot?

24. If I give $3 for a bushel of chestnuts, for how much must I sell them per quart to make $1?

25. Multiply 19.19 by 19.000019.

(FOR ADDITIONAL REVIEWS SEE LAST TERM OF FIFTH YEAR.)

SECOND TERM.

26. $\frac{3}{4} + \frac{3}{4}$ is how much greater than $\frac{3}{4} \times \frac{3}{4}$?

27. What will $5\frac{1}{4}$ yards of cloth cost at $2\frac{1}{4}$ per yd.?

28. If $5\frac{1}{4}$ dozen hats cost $180\frac{3}{4}$ what will 1 dozen cost?

29. What is the difference between $\frac{3}{4}$ of $\frac{3}{4}$ of 60, and $\frac{3}{4}$ of $\frac{3}{4}$ of 60?

30. ⅔ of 60 + ⅝ of 30 + ¾ of 32 = ?

31. Wm. had ¼ apples, John had ⅖, Henry had ⅓; how many did they lack of one dozen?

32. One man walks 11¼ feet, another man walks 2¾ feet; how much less than a rod is that?

33. Find the sum of ½ + .25 + ₁¼ + ₁¼ + ₃¼.

34. A man bought a hat and coat for $27.32. He sold the hat for $5.75 and the coat for $23.32; how much did he gain?

35. B. pays $18.50 for a cow and 3.5 times as much for a horse; what did he pay for both?

36. At 1.2 dollars each, how many books can be bought with $72?

37. At .45 dollars a pound how many pounds of tea can you buy with $1.935?

38. How many days in ½ of a week + ⅓ of a month of 31 days + ⅓ of a year? (365 days.)

39. John is 14 years old; how many weeks old is he?

40. What part of a year are 2 months + 1 month + 2 months?

41. A. White in Boston sold John Brown 11 oz. tea at $2 a pound, 17 cigars at $4 a hundred, 2 dozen clothes pins at 4 c. a dozen; make out a bill and receipt it.

42. What will be the cost of 6 pounds 5 oz. coffee at 40 c. a pound?

43. What part of a pound of tea are 3 oz. + 2 oz. + 1 oz.? · (Lowest terms.)

44. What part of 12 is 3? 4? 5? Add these factors. What is the sum?

45. (⅓ ÷ ⅓) + (⅔ ÷ ⅔) + (¼ + ⅓) = ?

46. If sugar is worth 8¼ c. a pound, how many pounds can you buy for $2?

47. If I pay 72 c. for a peck and a-half of salt, how much is that a quart?

48. If a man get $3 for cutting a cord of wood in 3 lengths, how much should he get for cutting it in four lengths?

49. How much larger is ⅘ than ¾?

50. John is 15 years old; ⅓ of his age is ¼ of William's; how old is William?

51. From the sum of $\frac{4}{10} + \frac{5}{100} + \frac{11}{100} + \frac{9}{10}$ take the sum of $\frac{4}{10} + \frac{5}{1000}$.

52. Add 10 millions and 10 millionths + 10 hundred and 10 hundredths + 10 thousand and 10 thousandths.

53. From 9 tens and 9 tenths take 9 and 9 tenths.

54. Change these numbers to thousandths and find their sum: .08 + .03 + .6 + .7 + .009 + .8 + .08.

55. Add 14 and 14 tenths + 9 and 103 hundredths + 18 and 18 tenths.

56. Multiply 1 and 1 thousandths by 1 and 1 thousandth.

57. Multiply 16 tenths by 16.

58. Divide 3 and 6 tenths by 36.

59. Divide .36 by 36.

60. Divide 36 by 3.6; 36 by .36; .36 by .36; 3.6 by .36; 3.6 by 3.6, and find the sum of the answers.

61. $\frac{2}{3}$ of $\frac{3}{7}$ of 35 is what part of $\frac{1}{2}$ of $\frac{1}{3}$ of 60?

62. What will $5\frac{1}{4}$ yards of carpet cost at $\frac{2}{3}$ of a dollar a yard?

63. How many sixths in $6\frac{1}{3}$?

64. In $5\frac{1}{4}$ how many 8ths?

65. Find the value in dollars, cents and mills of $\$\frac{6}{10} + \$\frac{2}{3} + \$\frac{2}{3}$.

66. How many fifths in $38\frac{1}{4}$?

67. $\frac{2}{3}$ of John's age is $\frac{1}{7}$ of his father's; how old is his father if John is 18 yrs. old?

68. If a man gave away $\frac{1}{4}$, $\frac{1}{3}$, and $\frac{1}{5}$ of his property what part of his property would he have left? If he had $90 how many dollars had he left?

69. Write 5 fractions that are equivalent to $\frac{11}{12}$. ($\frac{6}{12}$, $\frac{2}{3}$, etc.)

70. A man had $25 left after spending $\frac{2}{3}$ of his money; how much had he at first?

71. How much more is $\frac{1}{4} + \frac{2}{3}$ than $\frac{1}{4} \times \frac{2}{3}$?

72. Write five fractions that are equivalent to $\frac{1}{4}$.

73. Does a man give all of his money away if he gives $\frac{6}{10}$, $\frac{1}{3}$, and $\frac{1}{5}$ of it away? Why? (Because the whole is $\frac{15}{15}$.)

74. How much more is $\frac{2}{3} + \frac{1}{4}$ than $\frac{1}{4} + \frac{2}{3}$?

75. What will a carpet that contains 108 square feet cost, at $1.10 a square yard?

76. What will a man earn in two weeks at $2⅔ a day?

77. What will a man earn in a year at $12⅔ a week?

78. What will a boy earn in a year at $11⅓ a month?

79. What will a boy earn in a week, 10 hours a day, at 3⅓ c. an hour?

80. How much better is $10⅓ a week than $32⅔ a month for a year?

81. What will a man earn in two weeks at $2.6 a day?

82. What will a man earn in a year at $12.8 a week?

83. What will a boy earn in a year at $11.3 a month?

84. What will a boy earn in a week, 8 hours a day, at 3.3 c. an hour?

85. 3 tenths times .3 are how many more than .2 times .2?

(SEE LAST TERM OF FIFTH YEAR FOR MORE TESTS.)

SEVENTH YEAR.

FIRST TERM.

1. How much greater is ⅔ divided by ⅔ than ⅔ divided by ⅔?

2. How much greater is ⅔ divided by ⅔ than ⅔ multiplied by ⅔?

3. How much greater is ⅔ multiplied by ⅔ than ⅔ multiplied by ⅔?

4. Add ⅔ + ⅔ + $\frac{1}{6}$ + ⅓; from the sum take ⅓ × ⅔, and divide the product by 3⅓.

5. The minuend is ⅔, the difference is $\frac{1}{12}$; what is the subtrahend?

6. The difference is $\frac{11}{12}$, the subtrahend is $\frac{1}{13}$; what is the minuend?

7. The multiplier is ⅔, the product is $\frac{11}{12}$; what is the multiplicand?

8. The multiplicand is ⅔, the product is $\frac{1}{13}$; what is the multiplier?

9. The divisor is ⅓, the quotient is ⅓⅓; what is the dividend?

10. The sum of the numbers is ⅓⅓, the difference is ⅒; what are the numbers?

11. Find the sum of two numbers; 230 is ⅗ of the first number, and 180 is ⅔ of the other.

12. 460 is ₉₂⁄₁₀₀ of a number; what is the number? 920 is .92 of another number; what is the number?

13. In a room ⅓ of the people are German, ¼ are French, ⅛ are English, 16 are American, 8 are Spanish; how many are there in all? How many are there of each? *Ans.* 96 in all.

14. Said A. to B., how much money have you? Said B., if I had ⅓ as much again and $4 I should have $100. How much had B.?

15. Find the sum of the numbers of which 48 is ⅓, ¼ and ⅖.

16. How many yards of carpet 1 yd. wide will cover a floor 36 feet long, 10 feet wide? What if carpet is only ⅔ yd. wide?

17. A township contains 200 square miles; what would the whole town cost at $50 per A.?

18. A room is 16 feet square and 10 feet high; what will it cost to plaster the walls at 81 c. per square yd.?

19. How many eggs worth ⅓ c. each will pay for 66⅔ pounds of sugar at 2⅓ c. per pound?

20. How much more will it cost to paint a wall containing 10 feet square than one containing 10 square feet at 8 c. a square foot?

21. My farm is 160 rods square; what is it worth at $30 per acre?

22. Mr. Brown's farm contains 160 square rods; what is it worth at $30 per acre?

23. A tank is 17 feet 7 inches long, 10 inches wide; how deep must it be to hold 2 gals. of water?

24. How many bricks in a wall 20 feet long, 4 feet thick, 5 feet high?

25. By selling chestnuts for 9 c. a pint, I triple my money; what did they cost me a bushel?

26. What will be the cost of 2 pounds 11 oz. of tea at $3 per pound?

27. What will 43 pounds of coal cost at $7 per ton? 18 pounds at $9?

28. What will it cost to shingle a shed 180 feet long, 20 feet wide, at $5 per thousand, one shingle to cover 20 square inches?

29. What will be the cost of 8 T. 6 cwt. of coal at $5 per ton?

30. What will be the cost of 24 boards 10 feet long, 1 foot wide, and 24 plank 14 feet long, 1 foot wide, at $18 per thousand?

31. A cellar wall, 24 by 30 feet, 8 feet high and 2 feet thick, is to be built; how many cubic feet will it contain?

32. What will be the cost of a carpet for a stair containing 20 steps if each step is 10 inches wide and one foot high, if the carpet is worth 60 c. per yd.?

33. A floor containing 40 square yds. is 30 feet long; how wide is it?

34. How many cords of wood in a pile 20 feet long, 10 feet high, and 4 feet wide?

35. If a pile of wood is 5 feet wide, 8 feet high, and contains 37½ cords, how long is it?

36. What will it cost to dig a cellar 10 feet deep, 20 by 25 feet, at $2 a load? (1 cub. yd.)

SECOND TERM.

37. How many sq. inches in the floor of the kitchen? (See next page.)

38. How many sq. ft. in the floor of the dining-room?

39. How many sq. yds. in the floor of the parlor?

40. What would it cost to carpet the floor of the hall with carpet 1 yd. wide, and costing $1.26 per yard?

41. What will it cost to carpet the 12 steps, each 12 in. broad and 6 inches high, at 75 c. per yard?

42. If this ground plan represented a field, how many boards would it take to fence it 12 boards high, boards 12 ft. long?

43. How much waste would there be?

44. If the parlor is 10 ft. high, how many bushels of wheat could be stored in it? (2150.42 cu. inches to the bushel.)

K.—Kitchen.

C.—Cupboard.

D.—Dining room.

P.—Parlor.

H.—Hall.

Teacher draw a simi-
lar plan upon the black
board large enough to
be seen by the entire
class. (See Ex. 37.)

[Floor plan diagram with labels: K, D, 16½ feet, 3 ft., 15½ feet, 9 feet, 15½ feet, C, 6 feet, 12 feet, P, 19 feet, 4 feet, H, 10 feet, 22 feet, 10 feet]
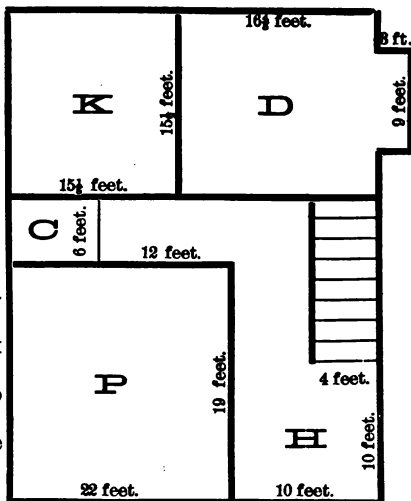
45. If the cupboard floor is covered with 1 ft. of water, how many gallons will that be? (231 cu. inches 1 gal.)

46. I lay a barn floor 14 ft. long, and use 1 dozen planks, 12½ in. wide and 2½ in. thick; what will they cost me at $18 per thousand? (board measure.)

47. A city built a street 2½ miles long and 5 rods wide through Mr. Smith's farm; what will the city pay him, if the land is worth $50 per acre?

48. A man sold land at $20.50 per acre and received $3,280; what part of a section of land did he sell?

49. Brown has a farm containing 15⅜ A. of land. He divided it into lots containing 12 sq. rods each, and sold them for $300 a-piece; what did he receive for them?

50. I buy ¼ ton of cheese for $130 and retail it at 15 c. a pound; how much do I gain?

51. From a hhd. of molasses ⅞ were drawn; how many gals. was that?

52. Gloucester County, N. J., contains 300 square miles. In 1870 this county raised 762,000 bushels of sweet potatoes; this was an average of how many bu. to the A.

53. At $2 a pound what will 8½ oz. of tea cost?

3

54. My parlor is 30¼ feet long by 22 feet wide; what will it cost to carpet it at $1.08 a yard, carpet ¾ yd. wide?

55. A man has a space 10 feet long and 5 feet wide. He desires to build a cistern that will hold 20 hhds.; how deep must he make it?

56. What will it cost to carpet a room 24 feet long and 18 feet wide, with carpet ¾ yd. wide, at $¼ per yard?

57. If a room is 24½ feet long, 12½ feet wide, what will it cost to carpet it at $⅞ a yard, for carpeting ¾ yds. wide?

58. What will it cost to paint a box and its cover, each side of which is 2 feet square, at 5 c. per sq. foot?

59. What if I have a box each side of which contains 2 square feet?

60. A post stands ⅓ of its length in mud, ¼ in water, and 15 feet out of the water; how long is it?

61. John has $50; ⅔ of his money + $40 is ⅘ of what William has; how much has William?

62. I have a bath tub 6 ft. long, 3 ft. wide, and 2 feet deep: if I fill it within 3 inches of the top with water, how much less than a ton of water do I have?

63. Henry had ¾ of $2, John had $3; Henry's money is equal to what part of John's money?

64. 2 feet 6 inches is what part of 6 feet 2 inches?

65. If bricks are $3¼ per thousand, what will it cost to build a wall 240 feet long, 6 ft. high and 3 ft. thick, each brick containing 64 cu. inches?

66. What will 840 lbs. of coal cost at $7 per ton?

67. What will be the cost of 3,840 cigars at $3 per 100?

68. A bin is 20 ft. long, 10 ft. wide, and holds 840 bushels of wheat; how deep is the bin? (2,150 cub. in. to the bu.)

69. A man owns ⅘ of a boat and sells ¼ of his share; what part of the boat does he still own?

8 feet.

2 feet.

Scale ¼ inch to the foot.
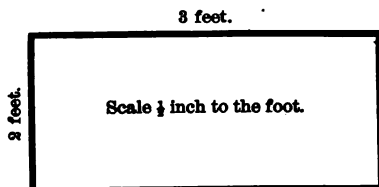
Note.—Teacher draw this plan (on the b.b.) 8 feet long and 2 feet wide.

70. How long is the room of which the above is a plan? How wide? (See plan, p. 34.)

71. What will it cost to lay tiles 8 in. by 6 in. to cover the floor, at $1.50 per sq. yd.? How many tiles will it take?

72. What will it cost to fence a lot the same size at 50 c. a foot?

73. If a tank, how many gals. of water will it hold, being 2 ft. deep?

74. How much would the water weigh?

75. What will 2 rods 3 yds. 1 ft. 4 in. of fence cost at $46 per rod?

76. My neighbor having 9,356¼ acres of land, sold ¼ of it to one man, and ⅜ of it to another; what was the value of the remainder at $25¼ per acre?

77. Bought a horse for $160¼ and sold it for ⅘ of the cost; how much did I lose?

78. A market woman, being asked how many eggs she had, replied: "244 equals ⅜ of them;" how many had she?

79. A merchant lost ⅜ of his capital by one creditor, and ⅜ by another, and had $850 left; what was his capital?

80. A man paid $5,250 for a fast horse, which was ⅜ of all of his property; how much was he worth?

81. How many square ft. in a stone 6 ft. 3 in. long, and 4 ft. 9 in. wide?

82. How many steps will five men take in walking 5 miles if they take 2 feet to a step?

83. Analyze—A lady teacher paid $750 for a piano which was ⅜ of her salary for a year; what was her salary?

84. Analyze—Nine feet of a flag staff stand in the ground, which is ⁹⁄₁₅ of its whole length; what is its length?

85. How many square ft. of leather will cover a box 24 inches long 18 in. wide and 6 in. high, including the lid?

86. Bought 40 acres of land at 75 c. per square yd., and sold it so as to double my money. Required my gain.

87. A stationer paid $1.25 a gross for pencils and sold them for a cent a-piece; how much did he gain on 5 gross?

88. How many dollars can be made from 50 lbs. 9 oz. of silver, allowing 412½ grs. to the dollar?

44 feet.

8 feet high.

10 feet.

18 ft.   8 feet.   8 ft.
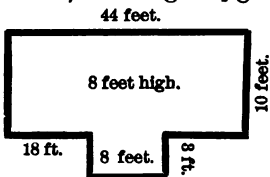
89. Find sq. yds. in walls and ceiling of this room.

90. Find cost of bordering at 7½ c. a yd.

91. Find the number of rods of fence around a lot of the same size!

92. Find the perches of stone in the walls, if 2 ft. thick.

93. Bought three tubs of butter weighing 25₁₅⁷, 29½, and 27½ lbs. The empty tubs weigh 5₁₅⁸, 5½, and 5½ lbs; what did the butter cost at 23½ c. a lb.?

94. What is the value of a silver vessel weighing 1 lb. 7 oz. 3 pwt. at $9 a lb.?

95. What will 3 cwt. 40 lbs. of coal cost at $7.35 per ton?

96. ⅔ lbs. + 2⅖ oz. + ⅘ pwt. = ?

97. Paid $2.50 for 18½ yds. of ribbon, and made it into badges of ⅙ of a yd. each, and sold them for 12½ c. each; what was the profit?

98. What is the sum of ⅘ miles and ⅞ rods?

28 feet.

10 feet high.

20 feet.

18 feet.

4 feet.
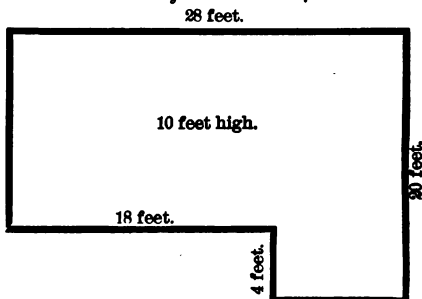
99. Find the sq. yds. in walls, floor, and ceiling.

100. Find the cost of wall-paper bordering at 11½ c. per yard.

101. How many tiles 8 in. by 6 in. will it take to cover the floor?

102. How many cords of wood could be placed in the room even with the ceiling?

103. How much cambric ⅜ yds. wide is required to line a dress containing 15 yds. of silk ⅞ yds. wide?

104. How many sheets of tin 14 by 20 inches will cover a roof, each side of which is 25 ft. long and 21 ft. wide?

105. How many rolls of paper 9 yds. long ½ ft. wide will it take to paper the four sides of a room 18 by 16 ft. and 9 ft. high, deducting 81 sq. ft. for windows and doors?

106. If I have ⅞ of an acre of woodland and sell 14½ sq. rods, how much have I left?

107. My woodshed measures on the inside 18½ ft. long, 8 ft. wide, and 12 ft. high; how many cords of wood will it contain?

108. How many paving stones 6 in. by 8 in. will pave a street 270 ft. by 50 ft., and how much will they cost at 9 c. each?

109. What will it cost to fence a lot 26 rods long and 20 rods wide at 25 c. a ft.?

110. At $¾ per yd. what will it cost to carpet the floor of a room 24 ft. long and 18 ft. wide, with carpet ⅞ of a yd. wide?

Note.—It will be well now to review the sixth year's work.

EIGHTH YEAR.

FIRST TERM.

Note.—Let a pupil read a problem and tell what is given, what is required, and how he would work it. When all the problems have been thus read, give five or six a day for the class to work.

1. A grocer having 1,925 pounds of sugar, sold 12½ per cent. of it; how many pounds did he sell?

2. The cotton crop of a planter last year was 450 bales; this year it is 12 per cent. more; what is this year's crop?

3. An oil well producing 2,375 gallons a day, loses 15% of it by leakage; what amount per day is saved?

4. A hogshead of molasses contained 63 gallons, but 15 gals. leaked out; what per cent. was the leakage?

5. A father gave his son $30 as a birth-day present, which

was 6% of the sum given his daughter; how much did he give his daughter?

6. Mr. Brown sold a carriage for $633, which was 5¼% more than it cost him; what was the cost?

7. A lady sold her piano for $628.25, which was 12¼% less than it cost her; what was the cost?

8. Sold a consignment of tobacco for $958.25; what was my commission at ¼ per cent.?

9. Mr. White sold goods amounting to $2,240, for which he charged $53.20 commission; what per cent. was that?

10. An agent charged 2% for selling a bill of goods, and received $93.50 commission; what was the amount of his sales?

11. After retaining 2¼ commission for selling a consignment of flour, my agent paid me $3,381.30; what was the amount of sales?

12. I sent my agent $3,502 to buy wool; after deducting his commission of 3%, what sum did he invest?

13. A man having $1,450 paid 18% of it for flour; how much did the flour cost?

14. In a school of 125 pupils 35 are boys; what % of the school is boys?

15. A regiment of 1,050 men went into battle and came out with 588 men; what % was lost?

16. The rent of a house is $450, which is just 9% of its value; what is its value?

17. I paid $210 for a horse, which was 30% less than I paid for a carriage; what did I pay for the carriage?

18. I sold a house for $799 and lost 15%; what was the cost of the house?

19. Goods bought for $850 were sold at a profit of 15%; what was the selling price? What was the gain?

20. Sold goods for $620 that cost $500; what was the gain per cent.?

21. Sold a piece of property so as to gain $24.90, which was 20% of its cost; what was the cost?

22. By selling iron at $49.50 a ton a profit of 12¼% is made; what was the cost of the iron?

23. My agent charges me $35 commission for selling a piece of property for $700; what % does he charge me?

24. My agent charged me $360 for selling my house; what did he get for the house, his rate per cent. being 2½?

25. My agent is to buy $800 worth of sugar for me; how much must I send him so that he can have 2% commission?

26. I send my agent $816 to buy apples; how many bbls. can he buy at $5 per bbl., after taking his commission of 2%?

27. A land speculator paid $6,075 for a farm, and sold it at 15% less than cost; how much did he lose?

28. A. began business with $4,200 and increased it 7% in one year; how much capital did he then have?

29. B. bought a house for $6,500 and afterwards sold it at a loss of 6%; what did he get for it?

30. Henry spelled 332 words out of 830; what per cent. did he spell?

31. Mr. Smith sold some wheat, making $360, which was a profit of 5%; what did the wheat cost him?

32. A provision dealer sold 800 bbls. of beef for $12,000, which was a loss of 25%; what did the beef cost a bbl.?

33. Mr. Williams bought a farm for $875, and was offered 33% advance for his bargain; how much was he offered?

34. What was the loss on a piano that cost $1,260, and sold at 20% loss?

35. What was the gain on a farm that cost $3,585, and sold at a gain of 12½%?

36. A dealer bought a span of horses for $450, and sold them for $600; what per cent. was his profit?

37. I sold a carriage for $432, which was 20% above cost; what was the cost?

38. I sold another carriage for $432, which was 20% less than cost; what was the cost?

39. I sold two cows for $60 each. On one I gained 20%, on the other I lost 20%; what was the cost of each cow? How much did I gain or lose?

40. An agent sold a house for $7,265; what was his commission at 1½%?

41. An auctioneer charged $405 for selling a farm, which was 1½%; for what did he sell it? What did the owner get?

42. The net proceeds of goods sold were $4,845, and the agent charged 2½% commission and 2½% for guaranty; what was the amount of sales?

43. I remitted to an agent $7,098 to buy cotton; after deducting his commission of 4 per cent. how much will be left for him to invest?

44. I desire my agent to invest $800 for me in cigars. His commission is to be 3%; what amount must I send him?

45. How many hats at $5 each can be bought with $2,575 sent to an agent, after he has taken his commission of 3%?

46. I buy goods for $445 and sell them for $712; what per cent. do I make?

47. I buy a village lot for $530 and sell it for $424; what % do I lose?

48. Mr. Britton paid $8,280 for a farm and sold it so as to gain 10%; what did he receive for it?

49. What must I ask for a book costing $1.80 so as to make 5 per cent. on my money?

50. By selling a farm for $2,760, a man gained on the cost 5%; what was the cost?

51. I buy tea for 80 c. a pound and sell it at 92 c. a pound; what % do I make?

52. I pay 10 cts. a pound for sugar and sell it for 9¼ c.; what per cent. do I lose?

53. I make $20 on a cow by selling her at an advance of 5%; what did she cost me?

54. Mr. Thornton buys coffee at 11 c. a pound and sells it at $9\frac{9}{10}$ c. a pound; what per cent. does he lose?

55. What is the per cent. of gain if I sell goods costing $842 so as to make a profit of $252.60?

56. At ½% commission, what is the commission on the sale of 648 bbls. of potatoes at $2 per bbl.?

57. An auctioneer sells for me a chair for $2, a table for $10, and 50 yards of carpet at 60 c. per yard; if his commission is 4%, what will be due me for the goods? How much commission will he receive?

58. What is the per cent. of commission when an agent reserves to himself $36 of $756, sent him to invest?

59. I send my agent $1,130 to buy corn at $2 per bushel;

how many bus. can he buy after deducting his commission of 3 per cent.?

60. A man owed $8,328. Failing in business he paid 30% of his debts; how much did he pay?

61. Mr. Lewis had $150 worth of hens, and sold them so as to gain 16%; what did he receive for them?

62. Which is less, 6% of 8,450 or 5% of 9,450, and how much?

63. A farmer having 240 bu. of wheat sold ⅝ of it; what % was that?

64. 4,808 is 8% of a number; what is the number?

65. By selling 400 bags of apples at $5 per bag I make 25%; what did the 400 bags cost me?

66. A man sold some hats for $196 and thus lost 2%; what did they cost him?

67. Goods that cost $111 are sold for $118.77; what % is made?

68. A boy has two tops. He sells them for 50 c. each; what did they each cost him if he gained 50% on one and lost 50% on the other?

69. What is the commission on selling $64,900 worth of goods, the rate being ½%?

70. My agent charged me $277, commission being 3%; what did he get for the goods?

71. A. sends his agent $643.77 to buy flour; how many dollars will he invest in flour, his commission being 3½%?

72. A gentleman having $6,784.50 in a bank, draws out 7½% of it; how much does he draw out?

73. A man buys a book for $1.25 and desires to sell it so as to make 8% profit; what must he sell it for?

74. What did a man get for a house costing him $805, if he sold it at a loss of 10%?

75. A man invests $641 and makes a profit of $64.10 by so doing; what % does he make?

76. M. Billin makes $37.50 or ½% on an investment; how much did he invest?

77. By selling goods for $23.31 a profit of 11% is gained; what was the cost of the goods?

78. Mr. Jones sells his watch for $95, which is a loss of 5%; what did he pay for the watch?

79. There have been 21 presidents of the United States. 19 $\frac{1}{17}$% of them died in office; how many died in office?

80. Two of the original 13 colonies were settled by the Dutch; what per cent. did the Dutch settle?

81. Of the first discoverers and explorers 6 were English, which is 33⅓ per cent. of the whole number; how many discoverers and explorers were there? 9 were Spanish; what per cent. were Spanish? 2 were French; what per cent. were French? 1 was Dutch; what per cent. was Dutch?

82. There were five battles fought in New Jersey during the war of the Revolution, which was 10 per cent. of the whole number of important battles fought during the war; how many important battles were fought?

83. Fourteen of the battles were fought during 1777; what per cent. of the whole number was that?

84. During the second war with England the principal land battles numbered 22, and 14 of them were gained by the Americans; what per cent. were lost?

85. Buy goods for $1,340, and sell them for $1,487.40; what per cent. do I make?

86. In a class of 42 all were present but 2; what was the per cent. of attendance?

87. A man sold sugar at .0794 c. a pound, and lost ⅓ per cent.; what did it cost him? How much money would he lose if he sold 10,000 pounds?

88. A boy sold popcorn for 27 c. a pint, and made a profit of 350 per cent.; what did the corn cost him?

89. By selling chestnuts for 14 c. a pint I make 250 per cent.; what did the nuts cost me a peck?

90. At 2½ per cent. how much commission will an agent get for selling 842 bbls. of flour at $5 a bbl.?

91. An agent receives $3.11 commission for selling goods at ⅓ per cent. commission; how many dollars' worth did he sell?

92. A. pays $116.60 for $5,830 insurance; what rate per cent. does he pay?

93. If it cost $875 to insure a cargo of goods valued at $50,000, what is the rate of insurance?

94. What will it cost to insure a house worth $2,400 for ⅜ of its value, at 1¼ per cent.?

95. What will 50 shares of railroad stock cost at $95?

96. What must I pay for 40 shares of railroad stock at 102, bro. being ¼ per cent.?

97. I buy 30 shares of railroad stock at 95 and sell it at 105; what do I make, bro. being 2 per cent. each way?

98. Buy 10 shares railroad stock for 90 and sell it for 95; what do I make, paying 3 per cent. bro. for selling?

99. How many shares of stock can I buy for $1,940, paying 2% bro., each share being worth 95?

100. I pay my broker ¼%; how many shares of railroad stock can he buy for $1127.50, stock being worth 102?

101. I send my broker $1,030; how many shares of H. R. R. stock can he buy me at 98, bro. being 5%?

102. Send my agent in Boston $2,366.40 to buy shoes; how many pairs can he buy after taking out his commission of 2%, the shoes selling for 40 c. a pair?

103. What will be the cost of insuring my house for $6,500 at ¼%, the furniture for $2,500, at ⅜%, and the barn and contents for $3,000, at 1%?

104. A merchant insured $3,600 worth of goods in one company at 1¼%, and $2,500 in another at 1¼.%; what was the cost?

105. The whole amount to be raised by tax in a state is $10,600. The property of the town is valued at $1,250,000, and there are 300 polls, each taxed $2. What is E.'s tax, who has $400 worth of real estate and $1,000 worth of personal property, and who pays 1 poll?

106. A tax of $6,971.60 is assessed upon a certain town, containing 430 taxable polls at $1.25 each; the real estate is valued at $1,354,000, and the personal property at $75,800; what will be R.'s tax who pays 1 poll and whose taxable property is valued at $5,750?

107. In a certain school district there are 200 polls, each of which is taxed $2, and the entire property of which is valued at $125,000. A schoolhouse costing $5,400 is to be built by public tax; what will be Mr. J.'s tax whose property is assessed at $4,500, and who pays one poll?

108. How must goods be marked that cost $3.50 a yard, so that 12½% may be deducted from the marked price, and still a profit made of 15%?

109. Bought ladies' hats at $5.10; what price must they be marked, that 15% may be deducted and leave 20 per cent. profit?

110. Bought a horse for $250; what must I ask for it that I may deduct 20 per cent. and leave a profit of 20 per cent.?

111. A man insured his life on the endowment plan for $4,000 for 5 years, at $51.85 per $1,000. He died after being insured 2 years; how much would have been saved had he taken out a life policy, with annual payments of $13.19 per $1,000?

112. A gentleman aged 30 insures for $6,000, at $30 per $1,000. After 5 years the directors reduced all further premiums one half; how much will he have paid in premiums at the age of 60?

113. Buy goods for $130 and sell them for $156; what per cent. do I make?

114. I sell goods for $144 and gain 20 per cent; what per cent. would I have gained had I sold for $150?

115. Having purchased a house for $4,500, and spent $500 in improvements, I sold it for $5,800; what per cent. did I make on my investment?

116. If I sell ⅔ of an article for the cost of the whole of it, what per cent. gain do I make on the part sold? (Suppose $4 were paid for the article.)

117. A dealer in real estate sold a farm for Mr. A., charging him 5 per cent. His commission was $375; for what did he sell the farm?

118. My agent in N. Y. bought a bill of goods for me amounting to $3,500. What must I remit, allowing him a commission of 2½ per cent.?

119. I received $3,700 to invest in land for Mr. B.; first deducting my commission of 8 per cent., how much can I expend for land?

120. I insure $1,700 on my house, $200 on my furniture and $100 on my books for 3 years, paying $18; what is the rate per annum?

121. Sold two horses for $100 each, gaining 25 per cent. on one and losing 25 per cent. on the other; how much money did I lose?

122. What is the specific duty on 12 casks of wine, each containing 40 gals., at $1.50 per gal., allowing 2 per cent. for leakage?

123. What is the ad valorem duty, at 25 per cent., on a quantity of merchandise invoiced at $3,500?

124. Find the duty on 120 chests of tea, gross weight 148 lbs. each, allowing 3 per cent. tare, at 3¼ c. a pound?

125. An importer receives an invoice of 320 dozen pint bottles of ale, invoiced at 85 c. per dozen. If 5 per cent. of the bottles are found broken, what will be the duty at 40 c. a gallon?

126. I insured my house, worth $20,000, for ⅔ of its value, at an annual premium of ¼ per cent. At the end of 10 years it was burned; what did I lose? What was the net loss of the insurance company?

127. I sold goods for $208 and gained 30 per cent.; would I have gained or lost had I sold them for $150, and what per cent.?

128. I buy a horse for $180, which is 10 per cent. less than his real value. I sold him for 10 per cent. more than his real value; what did I get for him?

129. I buy a horse for $57, which is 5 per cent. less than his real value. I sell him for 8 per cent. more than his real value; what do I get for him?

130. I buy 50 shares of railroad stock at 93 and sell it for 104; what do I make, brokerage being ¼ per cent. for buying, and ⅜ per cent. for selling?

131. I sent my agent 50,000 bbls. of flour, which he sold at $6 per bbl. On this he is allowed 2%. I then desire him to invest the balance in sugar at 5 c. per pound, after taking out his commission of 5%; how many pounds did he buy?

Note.—Call the attention of the pupils to this fact. The amount left after taking out the two per cent. contains what is to be invested in sugar and agt's commission. Therefore, it must be divided by 1.05 to find what he will invest, which is $280,000. If they make the mistake of multiplying the $294,000 by five per cent. they cheat the merchant out of $700 worth of sugar; because they pay the agent *commission on his commission*.

132. I send my agent corn, which he sells for $2,000. After taking his commission of 1% for selling, he is to invest the balance in wheat, after taking out 2% for buying; how much will he have to invest?

133. I send my agent $8,573.10 to buy apples at $5 a bbl., after taking out his commission of 2%. He buys the apples and the next day they advance to $7 a bbl. I direct him to sell them again and to take a commission of 3%; how much money does he return me?

<center>SECOND TERM.</center>

134.   NEWARK, N. J., *Oct.* 8, 1884.
$520.

On demand I promise to pay A. B., or order, five hundred and twenty dollars, value received.

<div align="right">J. W.</div>

Demand was made Dec. 8, 1884. The note was not paid till Feb. 8, 1885; what was due?

135.   ·   NEWARK, N. J., *Oct.* 8, 1884.
$520.

Six months after date I promise to pay A. B., or order, five hundred and twenty dollars, value received.

<div align="right">J. W.</div>

The note was paid Sept. 8, 1885; what was due?

136.   NEWARK, N. J., *Oct.* 8, 1884.
$520.

Six months after date I promise to pay A. B., or order, five hundred and twenty dollars, value received, with interest.

<div align="right">J. W.</div>

The note was paid Aug. 8, 1885; what was due?

137.   NEWARK, N. J., *Oct.* 8, 1884.
$520.

On demand I promise to pay A. B., or order, five hundred and twenty dollars, value received with interest.

<div align="right">J. W.</div>

Demand was made Dec. 8, 1884. The note was not paid till Feb. 8, 1885; what was due?

138. A. gave B. his note for $320, and when the note was

due paid him 6% for the use of his money. The interest amounted to $21.12; for how long did the note run?

139. A. offers B. $11 for the use of $250 for 6 mo. 18 days; what % is that?

140. What will be the interest on $10,000 for 1 year 1 mo. 6 days, at 3%?

141. A. loaned different men sums of money at 6%. At the end of 9 mo. 18 days the interest due him amounted to $1,920; how much money did he loan?

142. Find the compound interest on $100 for 2 years at 6%, annually.

143. Find the compound interest on $100 for 2 years at 6%, semi-annually.

144. Find the compound interest on $100 for 2 years at 6%, quarterly.

145. For how much must I give my note to receive $720 at the bank, time being 1 mo. and rate 6%?

146. I ask $340 cash for a cow. If I sell her for a note for $360, payable at a bank in 2 years 3 days do I make or lose money, and how much?

147. Which is worth the most and how much, $240 cash or a note for $250.51, due in 8 mo., without interest, rate 6%?

148. Add the bank discount, simple interest, true discount and compound interest of $500 for 2 years 6 mo. at 6%.

149. A man gave his note Jan. 1, 1868, for $800. Jan. 1, 1870, he paid $196; Jan. 25, 1872, $75; March 31, 1873, $161.50; what was due March 31, 1874? (6%).

150. The principal is $1,600. Note given Jan. 1, 1868. Endorsed as follows: Jan. 1, 1870, $392; Jan. 25, 1872, $150; March 31, 1873, $323; what was due March 31, 1874?

151. A. gave B. his note for $400 on Jan. 1, 1868. Jan. 1, 1870, he paid him $98; Jan 25, 1872, $37½; March 31, 1873, $80.75; what did he still owe March 31, 1874?

152.   NEWARK, N. J., *Jan.* 14, 1884.
$700.$\frac{00}{100}$

Six months after date I promise to pay A. B., or order, seven hundred dollars, value received.

J. W.

There was paid on this note Oct. 1, 1884, $110.50; March 1,

1885, $10; June 1, 1885, $114; Oct. 1, 1885, $110; **what was**
due Jan. 1, 1885?   (N.B. No interest till after six months.)

. 153. A note given April 15, 1867, for $1,000 had payments
as follows: $134 Nov. 9, 1867; $236 July 9, 1868; $21 Jan. 9,
1869; $263 July 9, 1870; what was due July 9, 1872?

154. What is due on a note Jan 1, 1874, that was given for
$240 Jan. 1, 1870, and had been endorsed as follows: April 1,
1871, $15; Dec. 1, 1871, $15.60; Sept. 1, 1872, $129.45?

155. I buy a horse for $500 cash; for what amount must
I draw my note, payable in 60 days, to be discounted at a
bank at 10%?

156. I have a note drawn for two years without interest
for $228; what is it worth now, money being worth 7%?

157. I take a note for $400, bearing interest at 10%, due in
3¼ years; what is its present worth, money being worth
7%?   (N.B.   This note will be worth $540 in 3¼ years.)

158. To the interest on $854 for 2 years 3 mos. 12 days, at
7%, add the interest on $23.03 for 2 yrs. 8 mos. 12 days at 8%,
and from the sum take the interest on $2 for 2 yrs. 2 mos. 2
days at 2%.

159. What is the difference between the true and bank
discount on $968.80 for 3 years 6 mos. 6 days, at 6%?

160. Find the interest on $24 for 18 days at 5%, and add it
to the interest on $5 for 18 days at 8%.

161. How long will it take $12 to double itself at 6%?

162. A baby 6 mos. old is named for its uncle, who then
gives it his note for $5 at 10%, payable when baby is 21 years
old; how much will uncle owe baby?

163. Another baby is named for his uncle, and when he is
21 years old he receives $10 principal and $12.40 interest;
how old was the baby when named?

164.   NEWARK, N. J., *Sept.* 1, 1870.
$600.

On or before two years from date I promise to pay A.B.,
or order, six hundred dollars, value received, with interest.

                                    J. W.

There was paid on this note March 1, 1871, $118; July 1,
1871, $110; April 1, 1872, $25; what was due Aug. 1, 1872?

. 165. A note, given July 1, 1862, for $450 at 6%, was paid

February 17, 1868. How much interest was due when paid?

166. Mr. White pays Mr. Brown $110.25 for the use of some money for 3 years and 9 months at 7%. How much did B. lend W.?

167. If a note amounts to $290.50 in 2½ years and 12 days at 6%, what is the principal?

168. B. agrees to pay A. $45.50 for the use of $260 for 2½ years. What rate does A. get on his money?

169. Mr. Williams let Mr. Henry have $350 at 8% interest. H. paid W. $63 for the use of it. How long did H. keep the money?

170. Note given May 20, 1874, for $16,500; endorsed: September 8, 1874, $450; December 14, 1874, $300; February 26, 1875, $500; July 5, 1875, $300; November 14, 1875, $2,500. What was due May 2, 1876?

171. What are the avails of a note, discounted at a bank, for $500 at 10%, time being ⅓ of a year?

172. A. gives B. his note for $77.25, January 1, 1881, without interest, for 1 year and 6 months. January 1, 1882, C. cashes it. How much should he pay B.?

173. In what time will $45 gain $1.44 at 4%?

174. August 15, 1871, A. gives B. his note for $88.56, without interest, for 1 year and 8 months. December 15, 1871, C. cashes it. How much should he pay B.?

THIRD TERM.

175. If 5 men, working 3½ hours a day for 7½ days, make 15 boots, how many boots can 7 men make working 2½ hours a day for 10 days?

176. If 6½ carloads of coal, each containing 4½ tons at $8½ a ton, are worth $243½, what will be the cost of 13 carloads, each containing 9 tons at $16½ per ton?

177. If 28 men in 10 days of 10 hours each can cut 280 acres of grass, how many A. can 20 men cut in 8 days of 8 hours each?

178. How long will it take 50 men working 8 hours a day

to dig a ditch 420 rds. long, 4 feet deep and 3 feet wide, if 40 men can dig it in 20 days of 8 hours each?

179. A. B. and C. go into business Jan. 1, 1868. A. puts in $1,000, B. $800 and C. $900. After 3 mos. they each add $5 more to their share. At the end of the year they find they have gained $10,000; what is each man's share of the gain?

180. Smith & White go into partnership for one year. Smith puts in $900 and White $1,200. After 4 mos. Smith puts in $400 more. They gain $1,500; what is each man's share?

181. 3 men hire a pasture for $80. A. has 6 cows, 2 horses and 10 sheep. B. has 20 sheep. C. has 6 sheep, and four cows. They count 2 sheep equal to one cow or horse; what share of the rent should each man pay?

182. A. and B. go into business Jan. 1, 1883. A. puts in $800, B. puts in $900, and April 1, they take in C., who puts in $500. They find, Jan. 1, 1884, they have gained $1,600. What amount of the gain will each man receive?

183. Three men hired a pasture for $100. One put in 25 sheep and 2 cows; another, 12 sheep and 5 cows; and the other, 6 sheep and 10 cows; what should each pay if 1 cow eats as much as 5 sheep?

184. A man working eight hours a day builds a cistern in 20 days; how long will it take him to do the same work, if he labors 10 hours a day?

185. If 72 men dig a ditch 20 yds. long, 1 foot 6 inches broad and 4 feet deep in 3 days, of 10 hours each, how many men would be required to dig a trench 30 yds. long, 2 feet 3 inches broad and 5 feet deep in 15 days of 9 hours each?

Note.—This book should be used as a text book in the higher grades. Let the first, second, third and fourth year's work be done mentally, through the year, and after the eighth year's work is finished, take the rest of the year in reviewing the fifth, sixth, seventh and eighth year's work as slate exercises.

A pupil who can work all of the tests in this book *understandingly* is ready for any ordinary business, or a high school course.

ANSWERS TO PROBLEMS.

FIFTH YEAR.

1. 4,000.004
2. 608,692
3. 12,216.222
4. $2,463
5. $3,971.75
6. $5,355
7. 9,333
8. $180.50
9. $124.75
10. $95.625
11. $32.25
12. 195
13. 76.8816
14. 21 days
15. $105.36
16. 2,500.14
17. 273
18. 83.405
19. $830.56
20. 12 times
21. 16 boys
22. 3
23. 4,885
24. 194.795
25. 10c.
26. 11.1
27. $78.15
28. 155

29. 38
30. 26¾
31. 50,335.318
32. $21,250
33. $1.08
34. $2,875
35. $4,791.36
36. $29.75
37. $419
38. 20
39. $3.12
40. $2,400
41. $1,038.50
42. 3,087,404,000
43. $820
44. 151.8
45. 78
46. $2.29
47. 10
48. 1 c.
49. $1,604
50. 1.324
51. $2.88
52. $15.825
53. .50
54. $23.52
55. $2.56
56. .30 c.

57. .64 c.
58. $8.05
59. 504,999.495
60. $11
61. $11.424
62. 48
63. 6¼
64. $219.64
65. 3 h. 6 m.
66. 7¼ h.
67. $1.30
68. $45.30
69. 158
70. 176,000
71. 7,707.951
72. $\frac{9}{10}$
73. 32
74. 72
75. No Ans. given
76. $3,641.80
77. 20
78. 12
79. 480
80. 19
81. 48
82. ⅜
83. ¼
84. ⅓

85. 3 times
86. 4
87. $\frac{1}{2}$
88. $\frac{1}{3}$
89. $\frac{3}{8}$
90. 2

91. 100
92. 5,636
93. $8.56
94. $28
95. $2.88
96. 4

97. 1,872
98. 5
99. 27
100. 45

SIXTH YEAR.

1. 1,002,310.132001
2. $471.50
3. 54 c.
4. $21.60
5. 100$\frac{1}{2}$
6. $\frac{3}{4}$
7. 8.18
8. 58$\frac{3}{10}$
9. 1.666
10. $\frac{103}{100}$
11. $\frac{3}{4}$
12. $\frac{7}{8}$
13. 9$\frac{3}{4}$
14. $\frac{21}{11}$
15. 90.11
16. 112.21
17. $\frac{23}{8}$
18. No Ans. given
19. $50
20. 35
21. 1.1
22. .5
23. 15 c.
24. .125 c.
25. 364.61036461
26. $\frac{13}{16}$
27. 16$\frac{7}{11}$
28. 31$\frac{11}{13}$

29. 7$\frac{1}{2}$
30. 81
31. 9$\frac{11}{14}$
32. 2$\frac{11}{16}$
33. 1$\frac{1}{2}$
34. $1.75
35. $83.25
36. 60
37. 4.3
38. 57$\frac{4}{5}$
39. 728
40. $\frac{5}{12}$
41. $2.135
42. $2.525
43. $\frac{1}{4}$
44. 1
45. 2$\frac{11}{12}$
46. 23$\frac{9}{17}$
47. 6 c.
48. $4.50
49. $\frac{1}{2}$
50. 9
51. 1.085
52. 10,011,000.11010
53. 81
54. 2.299
55. 45.23
56. 1.002001

57. 25.6
58. .1
59. .01
60. 122
61. $\frac{1}{2}$
62. 3\frac{1}{2}$
63. $\frac{14}{9}$
64. $\frac{14}{9}$
65. 1.733\frac{1}{3}$
66. 192$\frac{1}{2}$
67. 84
68. $5
69. No Ans. given
70. $125
71. $\frac{13}{14}$
72. No Ans. given
73. No.
74. $\frac{11}{12}$
75. $13.20
76. $32
77. 655\frac{1}{2}$
78. $136
79. $2
80. $150.83
81. $31.2
82. $665.6
83. $135.6
84. $1.584
85. .5

SEVENTH YEAR.

1. $\frac{7}{2}$
2. $\frac{7}{15}$
3. No.
4. $\frac{1}{4}$
5. $\frac{2}{3}$
6. $\frac{7}{8}$
7. $\frac{11}{12}$
8. $\frac{2}{3}$
9. $\frac{5}{8}$
10. $\frac{1}{4}$ and $\frac{3}{4}$
11. 516
12. 500 and 1,000
13. 96
14. $72
15. 304
16. 40 and $53\frac{1}{2}$
17. $6,400,000
18. $57.60
19. 200
20. $7.20
21. $4,800
22. $7\frac{1}{2}$
23. 5 inches
24. 8,400
25. $1.92
26. $5.775
27. $.1505
28. $129.60
29. $41.50
30. $16.42
31. 1,728
32. $88
33. 12
34. $6\frac{1}{4}$
35. 120 ft.
36. $370.77
37. 33,926$\frac{1}{4}$

38. 287$\frac{2}{3}$
39. 46$\frac{1}{4}$
40. $36.68
41. $4.50
42. 151
43. 5 boards
44. 3,358.8+
45. 448$\frac{144}{177}$
46. $7.875
47. $15.75
48. $\frac{1}{4}$
49. $61,500
50. $20
51. 28$\frac{1}{4}$
52. 3$\frac{11}{12}$
53. $1.07
54. $106.48
55. 3$\frac{53}{100}$ ft.
56. $48
57. $31.75
58. $1.20
59. 60 c.
60. 36 feet
61. $80
62. 31$\frac{1}{4}$
63. $\frac{2}{3}$
64. 1$\frac{1}{2}$
65. $37.908
66. $2.94
67. $115.20
68. 62$\frac{11}{12}$ in.
69. $\frac{5}{12}$
70. 72 and 48
71. $576
72. $120
73. 51,705+
74. 211 T.

75. $120.8078
76. $84,325.46
77. $128.40
78. 305
79. $3,150
80. $12,250
81. 29$\frac{11}{12}$
82. 66,000
83. $1,000
84. 75 ft.
85. 9$\frac{1}{4}$ sq. ft.
86. $145,200
87. $29.75
88. 708\frac{2}{3}$
89. 152$\frac{2}{3}$
90. $2.35
91. 6$\frac{11}{12}$
92. 60$\frac{7}{12}$
93. $15.59
94. $14.3622
95. $1.2495+
96. 7 oz. 15 pwt. 6$\frac{2}{3}$ gr
97. $16.25
98. 178 rds. 1 yd. 4$\frac{1}{2}$ in.
99. 215$\frac{1}{4}$
100. 3.73\frac{1}{4}$
101. 1,464
102. 38$\frac{1}{4}$
103. 12$\frac{2}{3}$
104. 540
105. 13$\frac{1}{4}$
106. 125$\frac{1}{4}$
107. 13$\frac{2}{3}$
108. $3,645
109. $379.50
110. $56

EIGHTH YEAR.

1. 240.625	38. $540	75. 10%
2. 504	39. $50, $75, $5,	76. $7,500
3. 2,018.75	40. $108.975	77. $21
4. 23$\frac{11}{17}$%	41. $27,000	78. $100
5. $500	42. $5,100	79. 4
6. $600	43. $6,825	80. 15$\frac{5}{11}$%
7. $718	44. $824	81. 18
8. 4.79	45. 500	82. 50
9. 2$\frac{2}{5}$	46. 60%	83. 28%
10. $4,675	47. 20%	84. 36$\frac{4}{11}$
11. $3,468	48. 9,108	85. 11%
12. $3,400	49. $1.89	86. 95%
13. $261	50. $2,628.58	87. $6
14. 28%	51. 15%	88. 6 c.
15. 44%	52. 5%	89. 64 c.
16. $5,000	53. $19	90. 105\frac{1}{2}$
17. $300	54. 10%	91. $622
18. $940	55. 30%	92. 2%
19. $977.50	56. $6.48	93. 1$\frac{1}{2}$
20. 24%	57. $40.32	94. $24
21. $124.5	58. 5%	95. $4,750
22. $44	59. $548.54	96. $4,100
23. 5%	60. $2,498.40	97. $180
24. $14	61. $174	98. $20
25. $816	62. 5% and 34\frac{1}{2}$	99. 20
26. 160	63. 62$\frac{1}{2}$%	100. 11
27. 911\frac{1}{2}$	64. 60,100	101. 10
28. $4,494	65. $1,600	102. 5,800
29. $6,110	66. $200	103. $100.63
30. 40%	67. 7%	104. 79\frac{1}{2}$
31. $7,200	68. $1 and 33 c.	105. $13.20
32. $20	69. $162.25	106. 27.12\frac{1}{2}$
33. $1,163$\frac{1}{2}$	70. 92.33\frac{1}{2}$	107. $182
34. $252	71. $622	108. $460
35. 448$\frac{1}{2}$	72. $508.84	109. $720
36. 33$\frac{1}{2}$%	73. $1.35	110. $375
37. $360	74. 724\frac{1}{2}$	111. $309.28

112. $3,150
113. 20%
114. 25%
115. 16%
116. 33⅓%
117. $7,500
118. $3,578.75
119. $3,425.92+
120. .003
121. 13½ c.
122. $705.60
123. $875
124. $602.95
125. $15.20
126. $8,600, $11,400
127. 6%
128. $220
129. $64.80
130. $487½
131. 5,600,000 lbs.
132. $1,941.17
133. $11,413.99
134. $525.20
135. $533
136. 546
137. 525.20
138. 1 y. 1 mo. 6 d.

139. 8%
140. $330
141. $40,000
142. $15.73+
143. $15.92+
144. $16.05
145. $723.98
146. $23.56 L.
147. 87½ Note
148. $294.122
149. $636
150. $1,272
151. $318
152. $406
153. $560
154. $97.20
155. $508.91
156. $200
157. $433.74
158. $141.37+
159. $36.10
160. 8 c.
161. 16 y. 8 m.
162. $15.25
163. 4 months
164. 408
165. $151.93

166. $420
167. $250
168. 7
169. 2 y. 3 mo.
170. $14,603.4
171. $491.25
172. $75
173. 9 mo. 18 da.
174. $82.
175. 20
176. $1,950
177. 128
178. 16 da.
179. $3,703.70
        2,962.96
        3,333.33
180. $760.56+ S.
        739.43+ W.
181. $26⅝, $34⅜, $18⅜
182. $616⅞ A.
        693⅓⅓ B.
        289⅓⅓ C.
183. 27⅓⅓
        28⅓⅓
        43⅓⅓
184. 16
185. 45

GEOGRAPHY.

LOCAL.

Point to where the sun rises. Point to the east.
Which are the cardinal points of the compass?
In what direction does your school building face?
Is the form of the building oblong or square?
Which direction is it the longer?
In what part of the building is your room?
What street near the front of the building?
In what direction does it extend?
In what part of the grounds is the building?
Bound the building by streets.
In what direction does the land slope?
Do you live in a city, village, or town?
In what direction is your home from the school? the church? the post-office? the depot?
About how long is your city from east to west? north to south?
What building or street is one mile from the school?
How long would it take you to walk there?
As you go home from your school is the land level or hilly?
In what direction is it up hill? down hill?
What do we breathe?
What is air called when in motion?
What is rain? snow? hail? What is a spring? a river?
In what county do you live?
What counties border it?
What is the name of the place in which you live?
In what county is it? In what state? In what country?
In what part of the county is it?

In what part of the state is the county?
In what part of the country is the state?
In what part of the continent is the country?
In which world is the continent?
What is the capital of our county? of our state? of our country?

THE STATE.

What state north of ours? east? south? west?
Measure the map of our state.
How many inches long is it from north to south?
How many miles does an inch represent on our map?
Then how many miles long is the state? how many miles wide?
In what direction does the northern boundary extend? the eastern? the southern? the western?

STATE GOVERNMENT.

Who is the highest officer in a state?
Who is Governor now? For how long is he elected?
Where is his office? What is the capital of a state?
What is the state capitol? Who makes the laws?
How many departments are there? How is a law made?
For how long is a senator elected? an assemblyman?
How many members in the senate? in the assembly?
Name a senator you have heard about. An assemblyman.

THE WORLD.

What does this globe represent? Why is it this shape?
What do different colors on the globe represent?
Of what is the surface of the earth composed?
Which covers most of the surface, land or water?
How much more of one than the other?
On which division of land do we live?
How does it compare in shape with the continent south of it?

Find how many miles long and wide it is.

Which is the larger, North or South America?

Which has the more regular coast line ? most mountains? rivers? countries?

Why is the name New World given to North and South America with their islands?

Name the continents of the Old World.

Which one most nearly resembles in shape the continents of the New World?

Which has the greatest number of islands?

Where are the greatest number of islands in the New World?

What ocean in the Old World is not connected with the New World?

What is a hemisphere?   What is the eastern hemisphere?

Bound North America.

NORTH AMERICA.

Which coast of North America is most irregular?

What causes the irregularity of the northern coast? of the eastern coast?

In what part are the most mounta

Where are the low lands?

What large river flows through the central plain?

What system has a chain of great lakes?

Is North America longer from east to west or from north to south?

At what point is it narrowest? widest?

If the ocean were to overflow it, which part would be covered last? why?

Which political division of North America is farthest north? south?

Into what body of water do the rivers of the Central Plain finally flow? why?

Why is North America not an island?

What part of the continent has the warmest climate?

Which river is of the greatest commercial importance, and why?

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Which portion of the continent is most thickly inhabited, and why?

Name five of the principal rivers that with their tributaries drain North America.

Give the general direction of each.

Locate an important harbor on the western coast of the continent.

What part of the continent has the best natural advantages for manufacturing? for agriculture? for commerce?

Why are Mexico and West Indies called tropical countries?

Where are the most precious minerals of North America obtained?

What can you say of the general surface of the continent?

Name the most northern, southern, eastern, western cape of North America.

Name two peninsulas of North America which point toward the north. Two that point toward the south.

Describe the Pacific Highland. Atlantic Highland. Central Plain.

How much longer is North America than South America?

Why are there more people in the eastern part of North America than the western?

Give three reasons for the southern part of North America having a more luxuriant vegetation than the northern part?

In what part of North America is the most manufacturing carried on?

Why is there more here than in the other parts?

Why is the population of North America so large?

What was the last part of North American territory purchased by the United States?

How do the rivers of North America differ from those of South America?

Why are the coast regions of the United States more healthful than those of Mexico?

What parts of North America belong to foreign nations?

What river of North America is celebrated for its islands?

If this river were to dry up what would these islands become? (Mountains.)

To what natural influence does Chicago owe its importance?

Why is New York such a noted city?

Where are the volcanoes of North America located?

Compare the vegetation of North America with that of South America.

How does the surface of North America compare with that of South America?

Why is not the northern part of British America more cultivated?

Of what use to the United States is Alaska? Why is it not colonized like the other parts of the United States?

Which coast of North America is the most even?

Why are there so few large cities on the Pacific Coast?

Why does the climate of California differ so much from the Atlantic states of the same latitude?

Which is higher, the Rocky Mountains or the Alleghany? About how much higher?

What country of North America supplies England with cotton? What oceans surround North America?

In what direction do the Rocky Mountains extend? Where are they the highest?

Name the great tributaries of the Mississippi River.

Which is higher, Lake Erie or Lake Ontario? (Erie.)

What is the outlet of the Great Lakes? Into what does it flow?

What large river of North America enters the Arctic Ocean?

Where is Hudson Bay?

Name three large lakes of British America.

Where is the Height of Land?

What country occupies all the northern part of North America excepting Alaska?

What are the boundaries of British America?

What is the southern part of British America called?

Bound the United States. Mexico. Yucatan. Central America.

SOUTH AMERICA.

What continent South of North America?

What natural division is it? Why?

Which has the greatest number of countries, North America or South America?

What mountain system of North America extends through South America?

By what name are these mountains known in South America?

Which are higher, the Rocky Mountains or the Andes?

Are there any long rivers on the western coast of South America? Why?

Name ten things in which North America and South America are nearly alike.

Name ten things in which North America and South America differ.

Name the river systems of South America.

With what system of North America does each compare?

Give the most northern capes of each of these two continents: North America and South America. Eastern. Southern. Western.

Which has the fewer mountains?

Name the largest city of each continent. River. Lake.

Through what countries does the Equator pass?

What is the climate of the northern part of South America? the southern?

Name three contrasts of these two continents. (The northern part of one is cold, the southern part of one is cold, etc.)

How many countries has South America? Which is the smallest? Which has no sea-coast?

Which country is the longest from north to south? from east to west?

Which is the narrowest from east to west?

Which has three capitals?

Tell the countries of which the following cities are capi-

tals: Bogota, Lima, Quito, Buenos Ayres, Santiago, Monte-video, Asuncion, Rio Janeiro, Caracas, Cayenne, Parama-ribo, Georgetown.

Name three exports of Brazil.

What joins North America with South America?

What is an isthmus?

What and where is the most southern land of South America? What is a cape?

Which is the largest country having no sea-coast?

Where are the forests of Argentine Republic and Venezu-ela?

What is the principal business of the people of these two countries?

Where are the table lands of Brazil?

What precious minerals are found in this country?

What can you say of the soil of this country? Of the forests?

In what branches of business are the people of this country engaged?

What choice fruit is raised here?

What kind of people inhabit the forests? the coasts?

Name three products of the forests.

What and where is Cotopaxi?

Where are the highest mountains?

Which country is the most thinly peopled? Why?

EUROPE.

In what hemisphere is Europe? In what world?

In which latitude, north or south?

How many inches wide is your map of Europe (east and west)? North and south? How many miles does an inch represent on your map? Then how many miles wide is Europe from east to west? From north to south?

Into what two natural divisions is Europe divided?

Compare High Europe with Low Europe in reference to its surface, productions, climate.

Which part of Europe resembles the United States as to vegetation? Why is this?

Which is the greatest commercial country of Europe?

Name the longest mountain range.

Why are the southern peninsulas of High Europe so warm?

Name the country that has the greatest number of arms projecting into the sea. What and where is the capital of this country?

Which coast of Europe is the most irregular?

Which resembles the eastern coast of North America the most?

From what two points can a line be drawn to separate Low Europe from High Europe?

Compare Europe with the U. S. in regard to vegetation.

Name the two outlets for commerce in Russia.

Why is Low Europe colder than High Europe?

Why is Europe more suited for commerce than Mexico?

Name two commercial ports of each country.

What limited monarchies produce the most silk?

In what part of Europe is Great Britain?

Name and locate the two great commercial centres of Great Britain.

Compare the largest city of Great Britain with the largest city of the United States.

What and where is the key of the Mediterranean?

Who possesses it?

What part of Europe is the most populous? Why?

Name three rivers that flow into the Black Sea.

Why is London larger than any other city in the mainland of Europe? (Fine harbors, etc.)

Which carries on the most commerce, Europe or the United Kingdom?

Name the countries included in the British Isles.

Of which is London the capital? Edinburgh? Dublin?

Name two absolute monarchies of Europe and locate their capitals.

For what kind of commerce is Moscow noted? Why?

Describe the surface of Italy. Productions. Exports.

What is the difference between the exports of the British Isles and the United States?

Why are the rivers of England of minor importance?

Name two natural divisions each of which is composed of two political divisions.   (Spanish peninsula.)

Is the eastern boundary of Europe natural or artificial?

In what country is the Rhine River?

What is the capital of this country?

What water north of it?

Of what is Madrid the capital? Vienna? Lisbon? St. Petersburg? Berlin? Brussels? Rome? Athens? Stockholm?

Name two rivers flowing into the Caspian Sea.

Which is the largest country of Europe?

Locate the mountainous parts of this country.

Which is the longer range?   What waters surround Italy?

In what direction does Italy extend?

What forms the boundary line between France and Spain?   Between Italy and Switzerland?

How do the rivers of Europe compare with those of North America with reference to length, depth, and size?

Name two volcanoes of Europe.

Are the rivers of Europe slow or rapid?   Why do you think so?   (Slow, land is so level.)

At what point does the Black Sea escape to the Mediterranean?

Write in a column the cities you consider important.

What is the northern part of the German Empire called?

What beautiful river in Germany?

In what part is it located?

Name the most western point of Europe.   Most northern.

What body of land north-west of Europe?

What natural division is it?   Why?

Point toward Europe.   Spain.   Norway.

How does Russia compare in size with the United States?

Compare the southern part of Europe with the United States with reference to climate and productions.

What production of Russia is found in Maine?

What part of Russia produces the same grains as the United States?

In what business are the people of Northern Germany engaged?

To what group of States of our country may Prussia be likened as to productions?

Compare Ireland with England and Scotland with reference to climate.

Which is the most beautiful city of Scotland?

Which is the greatest manufacturing city?

Name five large manufacturing cities of England.

What mines are found in England?

For what is Belfast noted?

Which part of England is the narrowest? Widest?

Is it longer from north to south or east to west?

Which part is mountainous?

What forms the boundary between England and Scotland?

Compare England with Scotland in reference to surface.

Bound England. Scotland. Ireland.

Name three political divisions of the British Isles that form one natural division.

ASIA.

How does Asia compare in size with the other continents?

In which directions is it the longest?

Where are the most mountains?

Which of the New-World continents does its coast-line most resemble?

How do the coast-lines of Europe and Asia compare?

What resemblance is there between Asia and Europe as to coast seas?

Which has the larger number of seas?

What river system of Asia corresponds with the Makenzie River of North America?

With what mountain system of North America does the mountain system of Eastern Asia correspond?

In what direction do both extend?

How do the rivers of Asia compare in number with those of Europe?

What natural divisions of land form the southern boundaries of both continents?

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What peninsula of Asia extends in the same direction as the peninsula of Italy?

Which peninsula of Europe is India most like?

How does the land of Northern Asia slope?

How do you know?

What causes the rivers of Northern Asia to flow north and those of Southern Asia to flow south?

What river of Europe rises in Asia?

Which is the largest country of Asia?

What ocean touches this continent that also touches the New World?

What one touches it that does not touch the New World?

What one touches the New World that does not touch Asia?

What land of Asia is nearest North America?

Where are the largest cities of Asia?

What country forms the eastern part of Asia?

Locate Chinese Empire. Japan. Turkestan. Arabia. Asiatic Turkey.

Locate Pekin. Canton. King-te-ching. Chang-chau. Su Chau. Bombay. Shanghai. Madras. Calcutta.

What countries compose Farther India?

What forms of government in nearly all of the countries of Asia?

How do they differ from those of our own country?

What races of people inhabit Asia?

What forms of religion are found in Asia?

Compare the climate of Asia with that of Europe.

Name some of the most important natural products of Asia.

Where are they found?

Name some of the productions of Asia that are also found in North America and South America.

Name same of the manufactures of Asia.

What natural products of Asia have you seen in this country?

What manufactured articles of Asia have you seen in this country? What animals?

Where is Aden, and to what country does it belong?

Under what government is India?

Name the most commercial countries of Asia.

Name ten important exports.

Name something you have seen from China. From India. From Persia.

In what book do you read of many of the countries and cities of Asia?

Of what ancient city of Asia do you read?

Locate Jerusalem. The Holy Land.

AFRICA.

What continent south of Europe?

What continent of the New World does Africa most resemble in outline? Bound Africa.

Compare the surface with South America.

Where are the important countries of Africa located?

Which countries have capitals of the same name as themselves?

Which countries nearest Europe?

What natural division is Africa?

What made it an island?

What river flows into the Mediterranean near this canal?

How does the soil of Central Africa differ from that of the other continents?

How does this desert compare in size with the United States?

What is an oasis? Name two of them in Africa.

Locate a republic of Africa.

With which countries of Africa did the United States have war?

What was the cause of this war? How did it terminate?

Name the most northern cape. Eastern. Western. Southern.

Name the countries of Upper Guinea.

Where are the Portuguese possessions?

What large island east of the southern part? What strait separates it from the mainland?

Locate the Congo River. The Niger.

What can you say of the climate of Africa as compared with the other continents? Moisture? Vegetation? Animals? Inhabitants? What parts of Africa do the most advanced tribes inhabit?

Which are the most commercial countries?

Name the exports of Egypt. Atlas regions. Sahara. Soudan. Guinea. Cape Colony.

Which of these are found in our own continent?

AUSTRALIA AND OCEANICA.

Which is the smallest of all the continents?

Name the five grand divisions of Australia

What natural division is this continent?

By what waters is it surrounded?

Name the divisions of Australia.

Describe the surface of Australia.

Where are the highlands of Australia?

What is its general shape?

Locate the most fertile region of Australia.

Name the waters that indent the shores of Australia.

Name the principal river of Australia.

Name and locate the largest city of Australia.

What large island south-east of Australia?

Name the important islands between Australia and Asia.

Of what is Melbourne the capital? Sidney?

Of what race are the natives of Australia?

To what country does Australia belong?

What part of the continent do the whites principally inhabit?

What are the natural productions of the soil?

Name the domestic animals, also the wild animals, of Australia.

THE GLOBE.

Where is the North Pole? South Pole? Bound each.

What is the Equator?

What are meridians? What are parallels?

What is latitude? Longitude?

Where is the Torrid Zone? What does Torrid Zone mean?
How many degrees wide is it? Bound it?
Locate the Frigid Zone. Temperate.
Bound each, and give width in degrees.
From what point is longitude reckoned?
From where is latitude reckoned?
Of what use are latitude and longitude?
In travelling from Rio Janeiro in Brazil to Caracas in Venezuela, how would you get over the Equator? (! !)
Name the continents that lie wholly north of the Equator.
South.
Which are crossed by the Equator? Tropic of Cancer?
Tropic of Capricorn?
Name a city that has no longitude.
Name one in east longitude. West.
What places have no latitude?
A city located 10° east longitude, is how far from a city 20° west longitude?
How far apart are two cities, one situated 30° east longitude and the other 40° east longitude?
In what latitude are the poles?
Which city would have the hottest climate, one situated in east longitude or one in west longitude, both having the same latitude?
What two peninsulas are separated by the Tropic of Cancer?
What two peninsulas are crossed by the Tropic of Cancer?
What two islands are crossed by the Tropic of Capricorn?
What is the greatest number of degrees of latitude a place can have? Of longitude? Why?
What two isthmuses just north of the Equator?
What is going to make South America an island?
Is this canal north or south of the Equator.

THE UNITED STATES.

How many states are there?
How many territories?
How many groups of states?

Which is the most north-eastern group? South-eastern? Central? Western?

How many states in the north-eastern group?

NEW ENGLAND STATES.

Which is the largest state of this group? Smallest? Which has no sea-coast?

Which has the most sea-coast? The least?

Name the states of this group that are longer from east to west than from north to south. Those from north to south than from east to west.

Which is nearly a square?

Which is larger, this group as a whole or California? (California.)

What is the meaning of Vermont?

Of which is Augusta the capital? Montpelier? Concord? Boston? Hartford? Where are the laws made in Rhode Island?

Why has this state two capitals?

Name the natural boundary lines of Maine. Of New Hampshire. Vermont.

Name the rivers of this group that form boundaries.

Where is the Height of Land in Maine?

Name three rivers that flow south from the Height of Land.

Name the waters that indent the coast of Maine. Of Massachusetts. Rhode Island.

What body of water borders the southern line of Connecticut?

What island south of Connecticut? Why so called?

How many groups the size of the New England group could be made out of the territory of Alaska? (Eight and one state larger than Pennsylvania besides.)

From which state of this group do we get large quantities of lumber?

In which are the minerals most abundant?

Which state is particularly noted for manufacturing and commerce?

Which are the most densely peopled states?

What can you say of the harbor of Boston?

In what city are tools and machinery manufactured?

Which is noted for its iron works and cotton mills? Shoes? Firearms?

Which is noted as a summer resort?

Which noted for the manufacture of sewing-machines? Carriages? Railroad cars? Woollen goods? Copper and glass-ware?

What group of states south-west of the New England group?

MIDDLE ATLANTIC STATES.

How many states in this group?

Bound the group as a whole.

Which extends farthest north? South? East? West?

Which most resembles in form an easy chair?

Which are longer from east to west than from north to south?

Which have coasts? Which is inland?

Which is the largest? Smallest? Most important? Why?

In what directions does the northern boundary line of New Jersey extend? Is it natural or artificial?

Name the natural boundary lines of New York. Pennsylvania. New Jersey. Delaware. Maryland. Virginia. West Virginia.

Which are narrower on their western side from north to south than on their eastern?

Which is narrower on the eastern side than the western?

Where is New Jersey the narrowest? Delaware? West Virginia?

Has Pennsylvania more natural or artificial boundary line?

At what point could you stand and throw a stone into three rivers? (Pittsburg.)

How would you sail from Lake Ontario to Lake Erie? (Welland Canal.)

From Lake Erie to the Hudson River?

Of which state is Albany the capital? Trenton? Harrisburg? Annapolis? Richmond? Where are the laws of Delaware made?

At which city does the legislature of West Virginia meet?

How much larger is Oregon than Pennsylvania? (More than twice as large.)

In which one of these states is found the largest city of the Union? The second largest? The third? Name these cities.

Name three important cities of this group the names of which begin with the letter B.

Name two beginning with N.

In what direction from New York is Newark? Point toward it. Point toward Oregon. For what is Newark noted ?

Write ten or more lines of an imaginary journey in which you visit the following cities: Pittsburg, Buffalo, Jersey City, Richmond, Dover, Wheeling, Syracuse, and mention the prominent characteristics of each.

Write ten more, comparing the Middle Atlantic with the New England group.

What four important capes on the coast of these states?

Name two arms of the ocean, and tell into what states they project.

Does the St. Lawrence River flow up hill or down hill?

How do all rivers flow?

Which is higher, Lake Erie or Lake Ontario? Which is further north?

Name three rivers of this group that flow toward the north.

In what direction do nearly all the rivers of Virginia flow, and why?

Name three rivers that cut their way through the Alleghany Mt. system.

Why are there no large cities on the southern coast of New Jersey?

Which of these states produces grain? Flour? Tobacco? Wool? Dairy products? Fruit and vegetables? Manufactures?

THE SOUTHERN STATES.

How many states in this group?

What natural division is the most south-eastern? Why?

Which is the most nearly shaped like the letter V?

Which would run to a point if the eastern and western boundaries were extended?

Where are the laws made in Tennessee? In North Carolina? South Carolina?

Of what is Atlanta the capital? Tallahassee?

Which one's capital city was named for a noted general? For a president of the United States?

What is the capital of Louisiana? Arkansas?

What two states are separated by a mountain range?

Compare the southern boundary lines of Alabama and Mississippi.

Which state has more natural than artificial boundary line?

In what general direction do the rivers of the eastern section of this group flow? Of the western section? What is the cause of this?

What kind of soil is good for raising rice? (Swampy.)

Which of these states have this soil largely?

What kind of soil is good for cotton raising?

If the ocean were to overflow this section which part would be covered last? (N. C.) Why?

What else is raised on the soil adapted for raising rice?

What important vegetable is raised in this group?

What Middle Atlantic state raises this vegetable in quantity? (N. J.)

With what other production beside cotton and potatoes is the rolling land planted?

What kind of timber is found in this group?

What are the productions of these trees?

Which is the largest river of this group?

Name some of its tributaries.

Which state has no sea-coast?

Which has the shortest coast-line?

Name three important capes off the coast.

What is the most southern cape?

Name the states that are longer from east to west than from north to south?

Which have their western boundary lines extending nearly north and south?

What mountains of this group, named for a large city of the United States?

Which is the oldest city of this group?

Which is the largest city of this group?

How far would you have to travel from this city to find a larger one?

What natural division east of this group? South?

What connects this with the ocean?

What two shallow channels on the coast of North Carolina? Name the cotton and rice sea-ports of this group.

Name the principal railroad centre of Georgia. The principal sea-port.

Name the largest city of North Carolina.

Name the metropolis of Tennessee.

Of what is Vicksburg the metropolis?

THE CENTRAL STATES.

How many states in this group?

Which one's northern boundary line is formed by a river?

Of which three is this river the southern boundary line?

Which two of this group are nearly square?

Which is made up of two peninsulas?

Name the bodies of water that form these peninsulas.

Which of these does not touch the Dominion of Canada?

Which of these states is the smallest?

How does it compare in size with Maine? (It is much larger. Maine containing 33,000 square miles, Indiana containing 36,000 square miles.)

Which is the largest of these states?

How does it compare with the New England states? (It is much larger than the whole group, the New England con-

taining 66,350 square miles, Minnesota containing 83,300 square miles.)

Where are the laws made in Wisconsin? In Minnesota? Where does the legislature meet in Michigan? In Iowa?

What is the capital of Indiana? Ohio?

Of what is Frankfort the capital?

What capital cities of this group were named for United States' presidents?

Where and what is the largest city of this group?

To what state would you go to find a larger city?

What body of water do the rivers of this group finally reach?

Through what two river systems do they reach the Atlantic Ocean?

What river forms the eastern boundary line of three of the states of this group?

Of what three states does it form the western boundary?

What kind of surface, for the most part, do these states have?

Compare the surface with the Middle Atlantic group.

Which of these states are longer from north to south than from east to west?

Which peninsula of Michigan is larger?

In which are the largest cities located?

Name a river, of each state, bordering on the Mississippi. On the Ohio.

Which state of this group raises the greatest number of hogs?

Where is the greatest pork market in this group of states?

Name the most important cities of this group. Why are they the most important?

What grain does the soil of these states produce most extensively?

What are the chief productions of Kentucky and Missouri?

What three furnish valuable lumber?

In which are there mines located? What kind of mines are they? Of what is Milwaukee the metropolis?

Which city of Michigan contains the greatest population?

In which city of Ohio are there the greatest number of
people?   What is the largest city of Indiana?
   Name the metropolis of Minnesota.   Iowa.
   What animals are raised for commerce in this group?
   Of what benefit to this group of states are the Great Lakes?
   Name three important lake ports.

THE FAR WEST.

   How many states in the western half of our country?
How many territories?
   How does a territory differ from a state?
   Which is the largest state of this group?
   How does it compare in size with the other states of the
Union?
   Which is the most western state of this group?
   How does California compare in size with Minnesota?   (It
is nearly twice as large.) .
   How do the rivers of this group compare in number and
length with those of the other groups?
   What are the natural causes of this?
   Name the mountains of this group.
   Which are the farthest west?
   In what direction do they extend?
   What is the general shape of states and territories in this
part of our country?
   Which is the most north-western state?
   Where are the fertile valleys found?
   What is raised in these valleys?   What kinds of fruit?
   What can you say of the trees found in the forests of this
group?
   What can you say of the natural scenery?
   Which is the " New York " of the far west?
   What is the principal city of Texas?   Kansas?   Nebraska?
Nevada?   Colorado?   Oregon?
   What are the people for the most part engaged in?
   What kind of mines are found here?
   In which mountains are the gold mines?   Silver mines?
   What state largely engaged in the salmon fishery?

What is a cypress tree? In what state are extensive forests of these found? Of what use are they?

What kind of mines found in Nevada found in another state?

Bound California on the north, east, and west.

Which is the longest river of this section belonging wholly to this section?

Of what territory does it form the western boundary?

Into what gulf does it flow?

How does this gulf compare with the Gulf of Mexico in shape and size?

Name three principal capes off the coast.

Into what body of water do they project?

On which side of the Old World is this ocean?

Point to Washington territory. Maine. Arizona territory. Lake Ontario. Gulf of Mexico.

Of whom did the United States purchase this country?

Where and what are the cañons?

Where is the National Park?

How does it compare in size with the state of Rhode Island? (It is more than twice as large.)

What name is given to the spouting springs of this park?

What capital city has the same name as an important city of Massachusetts?

What and where is Prescott? Carson City? Sacramento? Boise City? Virginia City? Cheyenne? Sante Fe? Salt Lake City?

Where does the legislature of California meet?

Where are the laws of Colorado made? Nebraska? Kansas? Of what is Austin the capital?

THE DOMINION OF CANADA.

What dominion north of our country?

Of what country is it a part?

Name its political divisions.

Which border on Hudson Bay? What bay within a bay?

Name two rivers that flow into Hudson Bay.

What two lakes south-west of Hudson Bay?

Name an inlet river of these lakes. Two outlet rivers.
What gulf on the eastern coast?
What mountains in the western part?
What is the chief pursuit of the people of the dominion?
What large city located on a river of the same name?
Of what is it the capital?
Where is the greatest commercial centre?
For what is Toronto noted? Hamilton? Kingston?

SOME ODD QUESTIONS.

(Only Geographical Answers to be Given.)

What has a mouth but cannot bite ?
What has an arm but cannot write?
What has a foot but cannot walk?
What has a head but cannot talk?
What has a bank with no money in?
What has a top that cannot spin?
What has a neck but has no head?
What never sleeps but has a bed?
What hook will never catch a fish?
What has a basin but not a dish?
Where are the locks keys do not turn ?
Where are the capes that are not worn ?
What has a branch but has no leaves?
What has no locks but has some keys?
What always falls but gets no scratches?
What is the ball that no one catches?
What is quite long but is not tall?
What has a base but plays not ball?
What are the poles that nobody climbs?
Where are the boys to answer these rhymes?

LANGUAGE.

FIRST TERM.

1. Make a period.   Make a question mark.
2. Write: Can I see an ox?
3. Write: I can see a fan.
4. Make this right: I can see Ann
5. Make this right: Has the cat a cap on.
6. Read this: $1 + 1 = 2$ (one and one are two.) Write it in words.
7. Read this: I see a 🕮.   Write it in words.
8. Make a question with the words, I can see a boy.
9. Tell something with these words : gun a Fred has.
10. What is this ? (make ? on b. b.) What is this? (.)
11. Which mark shall I use here?   Can I run
12. Which one here?   I see a boy

SECOND TERM.

1. Read this: $4 - 1 = 3$ (call — less).   Write it in words.
2. Make the words say something: me, see, play.
3. Make this right: may i run?
4. Write something you can do.
5. Write something you can see.
6. Make this right: see the pig.
7. Write a sentence beginning with can.
8. Fill in the blank: Dogs can ——.
9. Write a statement about John.
10. Write any five words you can remember.
11. Write two name words.
12. Write: 1, 2, 3, 4, with words.

1. Fill in the blank; My name is ———.
2. Write your full name.
3. Read: $3 \times 2 = 6$ (two times three are six). Write it in words.
4. Read: 2) 4 (2 (twos in four two). Write it in words.
5. Write the name of your city, town, or village.
     (REVIEW FIRST AND SECOND TERM.)

SECOND YEAR.

1. Write your name.
2. Write the name of your town or city.
3. Direct a letter to yourself.
4. Write: Get the man a hat.
5. Write a statement about a book.
6. Is this a statement about a book? (write on b. b.) Henry has a book. Why not.
7. What is it about? (Henry.)
8. Correct: have i a new Hat.
9. Which of the words written on the b. b. should begin with capital letters.

me	go	i
see	newark	willie
henry	new york	get

10. Put Willie in a statement.
11. Put Henry in a question.
12. Ask a question with have for the first word.
13. What is this a statement about: The chair is by the table.
14. What is this a statement about: The table is by the chair.
15. Me see run hill down. Change these words so as to make them tell something.

SECOND TERM.

Note.—Write this exercise on the b. b. Have the pupils form the words to make statements and then have the story read. The punctuation should show whether a statement or question is wanted, and all words written with capitals should be placed so as to make such use right. (Taken from the Unique Reading. Chart.)

Rover dog This is. good is dog He a. me with Rover play will. to him kind will be I. them well treat Dogs boys like to. us with play Fred would like you to? Ben yes O, sled and Get your let Rover us ride a give. run run Now Rover.

Write this backwards: Dogs run.

What changes have you made in the letters?

Do, Dogs run and Run dogs, mean the same thing? Why not?

Correct: can i see the Girls play.

Fill in the blanks: B—— play b—— in the y——.

THIRD TERM.

Write the following in words: $8 + 2 = 10$.

Write the following in words: $10 - 4 = 6$.

Write your name. The letter that stands for your first name. Your second name.

(REVIEW FIRST AND SECOND TERM.)

THIRD YEAR.

FIRST TERM.

Draw a picture of an envelope on your slate and direct a letter to yourself.

Write three statements and in each statement have the name of a thing.

Write a question and have the name of a person in it. Also the name of a city.

Make a statement of these five words: top, Frank, new, has, a.

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What is this statement about: The boys are playing ball.

Correct: frank and mary are Here in newark. May i go see the Old cow. is this Your Knife.

Fill in the blanks with is or are.

The boys ——— here.   The man ——— here.

The children ——— going.   Father ——— going.

Write the following in words:

3 times 2 = 6	4)8(2	6 + 4 = 10
¼ of 12 = 6	8 — 7 = 1	⅓ of 9 = 3

(*Note.* + — = should be read and, less, are.)

Write the initials of your name.

Correct: J W Smith.   John. H Smith

Write a letter and send it to your teacher through the post-office.

<center>SECOND TERM.</center>

Write the names of the months.   Of the days of the week. Four proper names.   Four common names.   Of to-day.   Of this month.

Name a material, thing, place, person, part.

Write all the proper name-words in one column and the common name-words in another column, that are found in these statements:

The boy bought the nuts in the city of Newark from a man named John White.   George White will go to New York with his sister to see the animals in the park.

Name the parts of the following: a book, a chair, a table, a hat, a coat, a watch, a piano.

<center>THIRD TERM.</center>

Repeat the alphabet and use an or a before each letter as follows: An a, a b, a c, an e, an f, a g, an h, etc.

Write four words having two vowels in each.   Four having only one vowel in each.

Use any of the following words to write a little story. Use only the words found in the list:

good	boy	see	in
a	sister	can	of
little	Ben	go	at
large	May	run	on
small	Frank	play	for
green	yard	jump	with
nice	grass	will	he
old	Rover	are	his
young	fun	is	she
pretty	and	have	they
the	but	has	her
what	dog	too	them

Example: Ben is a good little boy. He has a pretty little sister. They will play on the green grass. May and Frank will play with them. Rover will play too. Rover is a large dog. He can run and jump. What fun they will have.

FOURTH YEAR.

FIRST TERM.

Write a statement using the name of a person, a place, and a thing.

Write a statement having a common and proper name.

Write a statement using a name meaning more than one.

Fill in the blanks:

George —— a ball. Willie —— here to-day. The men —— a large drum. —— you going home.

Correct:

> There is henry.
> w. h. brown is here.
> See where i live.
> it is a fine day.

Write a word containing two vowels. One containing one vowel. One ending with a consonant. One ending with a vowel. One beginning with a consonant. One beginning with a vowel.

Note.—This will test their knowledge better than definition.

Punctuate: A piano has legs keys wires and a sounding board.

Write your name and address.

Write five different words that mean more than one.

Change the following words so as to mean more than one: tree, church, copy, ox, valley.

George may go to see the animals in the park. Change this to an inquiry.

Write a direct question.

Correct: did he go to baltimore

Have you written to walter,

Are you eating a apple

The rooms was full of people?

I have a book slate pen and pencil in my desk

John is that you

Ask a question about a person, a thing.

Write the name of this day. Of this month.

Write the name-words of the same kind in a column.

My sister and I will buy an orange of the old lady in Newark.

Mr. White gave us the money.

Rover will draw us to the store on a sled. Rover likes to draw May and me.

SECOND TERM.

Use the following words in an inquiry containing a word denoting possession: is, are, was, were, has, have.

Write the quality-words in a column.

Henry is now a good little boy.

The young colt ran swiftly.

The old rooster crowed loudly.

The new buggy rides easily.

The pure white snow falls softly.

The bright sunshine lights the dark hills.

The fierce dog growls fiercely.

Tell whether one, two, or more than two would be spoken of, in using the following: tall, most, longer, oldest, better,

little, easiest, rougher, smoother, ugliest, funny, wittiest, harder, tougher, careful, blunt.

Tell five quality-words that would describe each of the following names: man, dog, horse, chair, dress.

Write a command to a horse, a dog, a cat, a man, a boy, your sister, using a name, and punctuate correctly.

At the top of your slate on the right side write the words *Name-Words*, and on the left side *Action-Words*, and as the following list is read place a mark under the column to which the words belong: House, run, jump, man, play, laugh, girl, book, sweep, singing, apple, pick, sew, strike, hurt, carpet, paper. Write each of these words in a sentence.

THIRD TERM.

See first term of fifth year.

As you go home notice the signs on the stores, and write down three that you think are wrong. We will then write them on the b. b. and see what, if anything, is faulty.

Is this right?

> Smith & Brown
> Dry Goods

What is faulty in this?

> John. W. White.
> Cheap Cash Store.

FIFTH YEAR.

FIRST TERM.

Dictation Exercise.

George's ball is red and white.
Is this bright, new knife yours?
I like a hard, sour, juicy apple.
Will you, Julia, visit me on Christmas day?
That great, black dog's ears are long and silky.
Mary, have you seen the two boys' new hats?

The men's hats were all stolen.

Are the two dogs' collars alike, Charles?

Wheat, corn, cattle, sheep, and pigs are raised on the farms in the Central States.

We study reading, writing, arithmetic, spelling, grammar, geography, drawing, and music.

Chicago is a very large, busy, commercial city.

Are the deer's horns larger than the oxen's?

The lady's two thimbles were stolen from the boy's pocket.

Tell whether the following are singular or plural, and write their opposites: wharf, news, thief, arch, gas, money, oxen, man, men, scissors, deer, valley, lady.

Write the possessive, singular and plural, of each and put them in statements.

SECOND TERM.

In each of the following sentences tell how, when, or where the action was performed.

The western cities grow rapidly.

It is never too late to mend.

To write nicely we must write slowly.

Always speak the truth.   Never do a wrong action.

Be pleasant everywhere.   Seldom fail in your lessons.

Do all your work neatly.   Obey all signals quickly.

Never write carelessly.   Make your figures plainly.

Do your work quietly.

Punctuate the following sentences: Hark I hear some one coming Listen what is that Oh see a mouse a mouse

Use the following in statements, first as names, then as action-words: cry, drink, walk.

Fill out the following statements with *one* word telling where or when, after which fill with phrases telling where or when.

He went ———.   He struck the boy ———.   Henry saw the birds ———.   John will jump ———.   They caught the fish ———.

THIRD TERM.

Use correctly: sit, set, lie, lay, rise, raise, remembering that set, lay, and raise, must have objects or something to act upon.

Fill in the following blanks: The coat ———— nicely. ———— down. The hen ———— on eggs when we set them in the nest. Lay the blanket on the floor and I will ———— down. Rise from your chair and see if you can ———— the window.

Tell nine different ways in which a word may be used.

Tell three ways in which possession may be denoted.

Write five words that show possession without the use of the apostrophe.

SIXTH YEAR.

FIRST TERM.

Tell whether the following words are nouns, pronouns or verbs. (See note, seventh year, second term.)

I	you	boy	we
he	run	girl	go
get	play	hit	read
stop	jump	see	study
wood ·	lamp	it	are
John	Henry	William	Mary

Use each one in a sentence. Correct. Can i come In, here henry take my hat. o how pretty all Boys love to play.

Tell what the adverbs modify.

George is a very good boy. Henry ran swiftly.

Guy is very much better.

All sweet apples are packed now.

A pretty wooden stand is in the room.

There is a noise somewhere.

Tell the subject and predicate in the following: A noun is a name. Girls jump the rope. The boys play. I can walk. We are here.

Diagram each of the following: The little old man is here now. The old gray horse ran swiftly. The very good man came yesterday. A perfectly innocent man was found guilty. There comes the beautiful ship. He is a fine boy. The apples are good. I am poor.

Phrases.

He lives in the city of New York.
They are in the house of the president.
The man from the city is in the house.
The boy of good habits will do well in school.
The store of Smith and Whits was burned to the ground.
We saw the boys in the woods by the river.
He lives in the house by the church.

Compound Subject and Predicate.

The boy and girl are working examples.
Boys and men play ball. The boys run, jump, and sing.
The girls came and went at once.

SECOND TERM.

Fill in objects, complements.
I hit the ———. See the ———. They ran our ———.
Send our ——— here. Get me a ———. I will eat ———.
For other sentences see second term of eighth year.

Write all the sentences found in this verse in a column. All the nouns, pronouns, adjectives; all the subjects, predicates, phrases and adverbs.

I have a gray parrot that is a very bright pupil. She can whistle and talk, laugh and cry, cough and sneeze. She can mew like a kitten, and bark like a dog. She loves to swing in her ring in the cage, and she can climb very quickly. She is always happy, though at times she cries sadly. She eats bread and nuts.

Tell which words are used as objects and which are used as attributes.

Add infinitive phrases to the following:
He desired ——. His hope was ——. His desire
—— was right. His hope —— will be gratified. ——
is to learn. It was his wish ——. He got the axe ——
the wood.

Diagram the following sentences:

When will you go to see mother? I want to do well in
grammar. Do you wish to work? I do wish to work.
They are going to study now. George likes to study
history. To be honest is noble. To lie is base. To work is
honest. His power to talk was great. Her ambition to
pass was commendable. I have found a pen to write well.
He brought the horse to work on the road. We caught the
fish to eat. He is the man to talk. That is the man to
hear. I am the boy to run. This is a good book to read.
This is the day to plant trees. I have something to say.
To read good books is profitable. To swear is sinful. I
came to see you. To bear our fate is to conquer it. I am
surprised to see you. He attempted to speak.

Dictate the following sentences, after which have the pu-
pils write the participial phrases in a column:

The man running in the street is my father.
The boys playing in the yard are very happy.
The girls writing on the board are sisters.
We heard them laughing in the room.
They saw them swimming in the lake.
George found them rolling on the floor.
That is father singing from the book.
Thomas was the boy playing ball in the house.
John and Mary were the children running on the grass.
Diagram each of the above sentences.

Find the noun modifiers in the following sentences:
Henry's father lost William's book in the neighbor's yard.
John's knife cut the boy's finger. The ladies' hats are all
new. We will buy the men's boots. All the boys' hats were
found in the man's house on the child's bed.

What office does the noun boy perform in each of the following sentences:

The boy is here.   (Subject.)

He is the boy.   (Attribute.)

I saw the boy.   (Object.)

The boy's hat is lost.   (Modifier.)

Find the clauses in the following sentences and tell how they are used:

That fire is hot, is known.   I know that fire is hot.

The fire which was hot burned me.

I saw the fire that was hot.

He burnt his finger in the fire that was hot.

For other complete sentences see seventh and eighth years' work.

SEVENTH YEAR.

FIRST TERM.

Tell the dependent clause in each sentence, how it is used and what it modifies, after writing them from dictation.

1. I saw Henry when he first came home.

2. There was much excitement when the stamp act was passed.

3. The monarch of England refused to assist Columbus when he applied for aid.

4. It was wrong for Hull to surrender Detroit, when his men were confident of victory.

5. Gen. Gates was successful when he fought against Burgoyne at Bemis Heights.

6. Ponce de Leon was an old man when he discovered Florida.

7. Cornwallis was glad to surrender when he saw no prospect of relief.

8. The French, who were fighting under Montcalm, captured Oswego in 1756.

9. When Balboa discovered the Pacific Ocean, he called it the South Sea.

10. Cartier, who was a Frenchman, discovered the St. Lawrence River.

11. The war between France and England continued until 1763, when a treaty of peace was signed at Paris.

12. Pontiac, who was the principal chief during the Pontiac war, was assassinated by an Indian.

13. We should multiply the length by the breadth when we want to find the surface.

14. George can see the difference between ten square feet and ten feet square, when he pays for the carpets.

15. An island is a body of land that is surrounded by water.

16. The battle of Yorktown, which was fought in 1781, closed the Revolution.

17. Jersey City was called Paulus Hook, when captured from the British in 1779.

18. The corn is planted in Egypt, when the Nile overflows its banks.

19. The laws of New York are made in Albany, which is the capital of the state.

20. Washington went to Fort Le Bœuf, which was in Pennsylvania.

21. The Americans thought Parliament had no right to tax them.

22. It was in the Legislature of Virginia, where Patrick Henry distinguished himself.

23. Parliament passed the Boston Port Bill, which prohibited all intercourse with Boston by water.

24. Who said, "Don't give up the ship?" (Lawrence.)

25. Is he in the room that I carpeted?

26. Go and get the book that is on the desk.

27. Commodore Perry wrote: "We have met the enemy, and they are ours."

28. Who gained all the battles that were fought during the war with Mexico?

29. Name a battle fought in New Jersey that was gained by the Americans. (Princeton.)

30. Tell who were the commanders in the battle of Saratoga. (Gates and Burgoyne.)

31. The Black Hawk War occurred when Andrew Jackson was president.

32. Green was successful in the battle at Springfield, which is in New Jersey.

33. We caught the fish in the river that is full of islands.

34. The man was taken from the house that was burning.

35. Our house is on the street that was named for Jefferson.

36. Get the book from the desk that is in the sitting-room.

37. We found the eggs in a nest that we did not know was there before.

38. Bring me a book from the pile that is on the floor.

What kind of pronouns are used in these sentences: Who is it that wants me? What has he that you want? To whom will you give the book? Is this the boy, who asked the question? What is who in this sentence? Let each one look out for his or her own hat. Give him some to eat. There were only a few there. This will do. Where did you get those?

Tell the kind of adjectives found in the following: The American flag floats gracefully. The Irish vote has been taken. That is a rare plant. William is a tall boy. See the dense fog. We had a jolly time.

Note.—As the teacher reads this list of verbs let the pupils listen and write, T. In., or b., according as to whether the verb is transitive, intransitive or both. After, have the pupils exchange slates as the teacher reads. Thus: the teacher reads found, the pupils mark T on slates. Teacher then reads went, pupils write In. Teacher reads sleep, the pupils write b. The teacher then reads down the list naming the kind, thus: transitive, intransitive, both transitive and intransitive; the pupils mark right or wrong as the case may be. In this way every pupil recites every word.

know	struck	dictate
said	taught	diet
heard	want	dig
went	get	desert
walk.	see	gain
go	droop	gather
found	drop	hint
hunt	confide	insist
thought	befall	make
gallop	behave	mix

Illustrate each in a sentence. Those that are b. to be used in two sentences illustrating the T. and In.

More slate work to be marked as above. R. for regular, I. for irregular, B. for both R. or I.

Be	love	laugh	strike
buy	walk	learn	get
come	run	do	kneel
burn	sink	eat	place
threw	talk	fell	reduce
add	express	meet	have
give	take	use	connect

Use each in a sentence expressing past time.

Teacher read this list of adverbs having pupils mark as above. T. for time, P for place., D. for degree, M. for manner.

Now	so	ill	hence
when	as	justly	thence
where	how	truly	hardly
first	no	ever	then
there	yes	never	therefore
fully	well	always	surely
otherwise	somewhat	thirdly	seldom

Use each in a compound sentence and tell what kind of conjunctions you have used in each.

Use the plural of the following nouns in complex sentences: bug, lash, echo, city, valleys, half, fort, goose.

SECOND TERM.

The following are to be changed in gender, then used in a simple sentence: Jew, nephew, hero, actor, maid, sir, duke.

In what case is I, *always* used? me? he? him? they? she? her? them? (N. B. Use each one as a subject, an attribute, or object.)

Use the possessive plural of the following in simple imperative sentences; man, wolf, fox, lady, thief.

Correct: John and henry comes to our house every day. It was me you see there. Where was you when he done it? I can't never tell when he is joking. It don't make no difference it is mine to do what I will with it. Between you and I, he starts to-morrow. I want he should go. Who did you give it to? Can I go please? You can if you may.

Tell the mode and tense the verbs are in:

I will go. You may see him. If I hear it. Can she sing? Get the apple. Hit the horse. I saw her. To see is to know. If I saw it I cannot recall the fact. I found the boy

crying. You must come to-morrow. You can go, if you only will go. Would you do it? If they see me, they will have gone by that time. Come here at once.

Write a letter to your teacher and send it to her through the post-office.

Write a story about this picture (Teacher show class a picture). For other hints use second and third term of eighth year.

EIGHTH YEAR.

FIRST TERM.

Correct: It is me. If I was him. That is her. This is hern. Who did you say? Whom is it? It was them who said it.

Write a sentence containing a regular verb in the past tense. Present tense. Future tense.

How can you tell when a verb is in the potential mood? You may tell me in *this* sentence.

What verbs have no person and number?

Why have they not? (They have no subject.) Write a sentence *containing* a verb in the infinitive mood. Is there an infinitive in this sentence, if so, which is it? To write an infinitive, one must think.

What verbs are always in the present tense? The second person? Why? Write a command. Write, Dogs run.

Make a command of it. What is the subject of this sen. tence: John, get me a hat.

Why is not John the subject? What is always the subject of an imperative sentence?

Correct: She looked splendidly. Why is it faulty? Correct: She walked splendid.

Write the plural of the following nouns: ox, cow, hero, valley, daisy, beef, man, goose and knife. (Use each in a sentence.)

Fill in objects. I found the ———. I saw a ———. Get me a ———. We heard a ———. William found his ———.

Write an imperative sentence containing an object. A declarative. An interrogative.

Correct: The chair's legs are broken. Why is it faulty? (Because the possessive sign should be confined chiefly to names of persons and animals.)

Correct: Him and I are going. Her and me will go. Between you and I. There were only him and me in the room.

Add participles to the following:

We heard the man ——— a song.

They found her ——— a letter.

George caught them —— some candy.

Write a complex sentence beginning with when. One beginning with who. One with which.

Parse the nouns and pronouns in these sentences: Give us this day our daily bread. God is love. Hand me the book. It is I, your son. I know what it was. Come here to me, Henry.

Write a letter to your teacher and send it to her through the post-office.

SECOND TERM.

Write a sentence having the dependent clause used to modify the subject. One to modify the object. One used as an adjective. One as an adverb. One as a noun. One used as the subject. One as the object. One as the attribute. One used to modify the principal word in a prepositional phrase. Principal word in a participial phrase. One to modify the object of an infinitive verb.

Add dependent clause to the following and tell how used:

I heard ——————. He wished ——————.

We know ——————. John remembers ——————.

They said ——————. All understand ——————.

William thought ——————. We have learned ——— ———.

Add dependent clauses to the following and tell how each is used:

He wished to read the book —————.

Henry desired to see the man —————.

I was anxious to know the lady —————.

Add dependent clauses to the following and tell how each is used:

We saw the book in the room —————.

He lives in the city —————.

I heard of the man —————.

Mary was engaged writing the letter —————.

John was singing the song —————.

Correct: I caught the fish sitting on the fence. The man brushed a fly from his nose running down the street. Thomas saw the steam-boat running on the island. We saw the old hen swimming in the river eating corn. The ladies saw the dog dancing on the street.

Write one sentence containing all the parts of speech. One containing three different kinds of pronouns.

Tell what parts of speech are in the following sentences:

When I went home, I heard an old man and woman in the house, exclaiming, alas! alas!

Name the pronouns in the following and tell what kind they are: Who is the man that says I cannot read?

Write sentences, using laughing first as a noun, second as an adjective, third as a participle.

Tell how dancing is used in each of the following: The dancing was continued till ten o'clock. We saw the ladies dancing in the room. They had a dancing bear in the show. The ladies dancing felt the cool air coming in the window.

Write a compound sentence having the second clause complex.

Give the analysis to the following sentences:

War has ceased, and peace, which has long been looked for, has come. God is love, and they who love Him will do his will.

They walked into the house as I walked out. (N.B. The meaning of this sentence is, They walked into the house *when* I walked out; it is therefore a complex sentence.)

Write six sentences and have the same noun perform a different office in each.

What office does the noun John perform in each of the following sentences:

John is a good boy. We saw John. That boy is John. John's hat is here. My friend John comes to-day. John, come here.

Write a sentence containing a phrase used as a noun. As an adverb. As an adjective. As an object. As a subject. As an attribute.

How are the phrases used in the following sentences:

His hope is to pass from his class. To study is to learn.

He wished to go home. His wish to go was granted.

George went into the house.

Write a sentence with the subject, predicate and object, each modified by a phrase.

Analyze: The boy of good mind saw the man of learning in the study.

Write a sentence in which the clauses are connected by conjunctions. One connected by an adverb. One by a pronoun.

What kind of connecting word in each of the following sentences:

George went home but Mary remained here. .

I will start when the rain stops.

This is the dog that bit me.

I will try to do as my father tells me.

THIRD TERM.

Find the clauses in the following verse, write them in a column, tell what kind they are and what office they perform. Make eight columns and head them with the names of the different parts of speech and in each column write the parts of speech found in the verse. Find all the phrases and write them in a column, and tell how they are used. Write the sentences in a column and tell the kind of each:

"The Roman, therefore, who saw no joke in sitting round the table in the dark, went off to bed as the darkness began.

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Everybody did so.   Old Numa Pompilius himself was obliged to trundle off in the dusk.   Tarquinius might be a very superb fellow, but we doubt whether he ever saw a farthing rushlight; and, though it may be thought that plots and conspiracies would flourish in such a city of darkness, it is to be considered that the conspirators themselves had no more candles than honest men.   Both parties were in the dark."

Note.—In ancient times people had no candles or lights. A farthing rushlight was dried rushes used as wicks. De Quincey thinks that Tarquinius had never seen them even. They then went to bed because they had to go.—(*Taken from Thomas De Quincey's writings.*)

Have the pupils write a letter to you and send it through the post-office.

Complex Sentences from History.

1. Sir George Calvert, whose title was Lord Baltimore, applied for a charter to establish a colony in America.

2. The English king claimed the land that the Cabots discovered.

3. That Washington was the first president is a historical fact.

4. When Pocahontas was married there was peace with Powatan.

5. Bacon died while Berkeley was governor of Virginia.

6. De Soto was sunk in the waters of the Mississippi, which he had discovered.

7. Columbus believed that the earth was round.

8. The Dutch laid their claim upon the discoveries which had been made by Henry Hudson.

9. Henry Hudson, who sailed in the interest of the Dutch East India Company, discovered the Hudson River.

10. Pocahontas accompanied her husband to England, where she was an object of interest to all classes of citizens.

11. Ponce De Leon discovered Florida in 1513, when he was searching for a fountain.

12. That Virginia was settled in 1607 is a well-known fact.

13. Spain, which was unwilling that the settlement on the St. John's should exist, sent Melendez to destroy it.

14. Wingfield, who embezzled the public stores, was succeeded by Ratcliffe.

15. Amherst reached Ticonderoga when the French abandoned it.

16. Smith went where the Indians captured him.

17. We know that Cortez conquered Mexico.

18. Our country was at war when Lincoln was president.

19. It is said that Gosnold discovered Cape Cod.

20. America is the continent that was discovered by John Cabot.

21. Raleigh's body was motionless when the executioner cut off his head.

22. The territory, which the English claimed, extended from the thirty-fourth to the forty-fifth degrees of north latitude.

23. Roger Williams, who had been banished from Massachusetts, settled Rhode Island.

24. History says, Pring explored the coast of New England.

25. We know that Cordova explored the northern coast of Yucatan.

Complex Sentences from Geography.

1. Chicago, which is a great grain centre, is in Illinois.

2. Ireland, which is an island in Europe, is noted for its fertility.

3. Great Salt Lake, which is in Utah Territory, is the largest salt lake on the globe.

4. Boston, which is a capital city, is in Massachusetts.

5. The Blue Mountains, which extend north-east and south-west, are in the eastern part of the United States.

6. The Amazon, which is in South America, is the largest river in the world.

7. We know that the St. Lawrence River is the outlet of the Great Lakes.

8. The Mississippi River, which has many tributaries, is in the United States.

9. That Cuba is an island is a well-known fact.

10. We found the map of Europe, which contains the largest cities in the world.

11. Did you ever see Australia, which is south-east of Asia?

12. I have seen the Red River which is in Minnesota.

13. Florida, which is in the south-eastern part of the United States, is a peninsula.

14. A passage of water, which connects two bodies of water, is called a strait.

15. A part of the ocean, that enters into the land, is called a sea, gulf or bay.

16. Oil is found in Pennsylvania, which is one of the Middle Atlantic States.

17. British America is the name of the country which is north of ours.

18. Kentucky, which borders on the Ohio River, raises large quantities of tobacco.

19. The globe shows that the earth is round.

20. Geography does not say, that north means up-hill.

21. We found that the Rocky Mountains are in the western part of the United States.

22. An outlet river is one which lets the water out of a lake.

23. An inlet river is one that lets the water into the lake.

24. The pine-apple, which is a native of Brazil, is much prized by the Americans.

25. Geography is the study that tells about the earth.

Complex Sentences from Arithmetic.

1. When you multiply the cost by the rate, you find the gain.

2. We divide the percentage by the base, when we want to find the rate.

3. When money, containing the commission and amount to be invested, is sent to an agent, it is always the amount.

4. We divide the percentage, which is the amount gained, by the base to find the rate.

5. You get the percentage, when you multiply the base by the rate.

6. When you have the amount and rate, you must divide the amount by one plus the rate to find the base.

7. Addition is used, when the sum of two or more numbers is wanted.

8. He worked by multiplication, which is a short method of working addition.

9. A floor, which is ten feet square, contains how many square feet?

10. A floor, which is ten feet square, contains one hundred square feet.

11. A floor which contains nine square feet, can be covered with one square yard.

12. A floor, which contains nine feet square can be covered with nine square yards.

13. Legal interest is the rate per cent. which is fixed by law.

14. The interest on one dollar at six per cent. is six cents, when it is loaned for one year.

Compound Sentences from History.

1. Gates commanded the Americans at Saratoga, and he defeated Burgoyne at that time.

2. At the battle of Springfield in New Jersey, Green commanded the Americans, and Knyphausen commanded the British. .

3. In the war with Mexico, Taylor gained four battles, and Scott gained five battles.

4. President Taylor died in 1850, and Fillmore was inaugurated president the same year.

5. Columbus discovered America, but the continent was named for Amerigo Vespucci.

6. Cordova discovered Mexico, but Cortez conquered it.

7. During the second war with England the Americans gained fourteen of the land battles, and the British gained six of them.

8. Washington was the first president of the United States, and he was elected for two terms.

9. The civil war began during Buchanan's administration, but it ended during Lincoln's second term.

10. The Senate is composed of two senators from each state, and each senator has one vote.

11. The vice-president of the United States is president of the Senate, but he has no vote unless there is a tie.

12. A representative must be twenty-five years old; and he must live in the state from which he is chosen.

13. The president must be thirty-five years old, and he must be a natural-born citizen of the United States.

14. The president is elected for four years, but he may be re-elected.

15. Two presidents have died in office, and two have been assassinated.

Dictate the following:

Newark, N. J.,
Feb. 29, 1884.

John Barnes, Esq.,
    Chicago, Ill.
My Dear Friend:

    It gives me great pleasure to introduce to you my friend Mr. George Ludlow.

    Any attention you may be able to show him I shall esteem as a personal favor.

Yours truly,
Lillie Gould.

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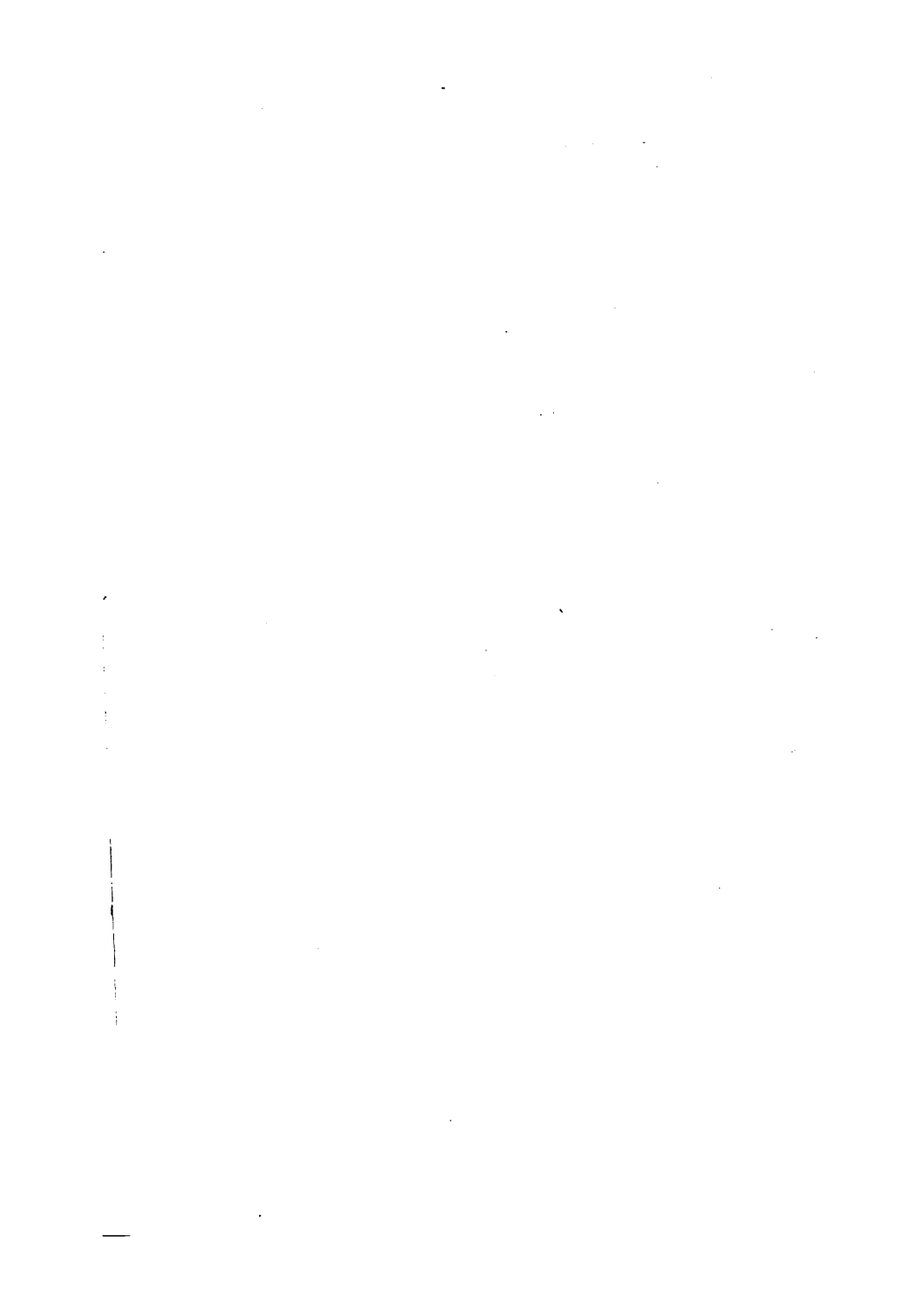PEABODY. Handsomely bound in cloth. Just published.

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